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## STATUS OF DOD ROBOTIC PROGRAMS

Contract Number: DAAK11-84-D-0004
Task Order #3

FINAL REPORT March 1985

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## INTRODUCTION

The US Army Ruman Engineering Laboratory (USAHEL) has been designated as the US Army Materiel Command (AMC) lead Laboratory for robotics. One of the functions of this assignment is to monitor all of the robotic activities within AMC and to identify areas of overlap and voids in the robotics research and development program. The Director of USAHEL also serves as the Chairman of the Army, Navy, and Air Force Laboratory Directors' Joint Technology Panel on Robotics (JTPR). There is a requirement for the chairman to report periodically on the status of all robotic studies and projects throughout the three Services, exclusive of the Artificial Intelligence (AI) aspects which are being handled as a separate effort.

## BACKGROUND

The US Navy has been assigned responsibility for the design and maintenance of a Tri-Service robotics data base. This data base is known as the Robotics/Artificial Intelligence Data Base (RAID). The primary source of input to RAID is the DoD form 1498, "Research and Technology Work Unit Summary". A spot check revealed that many of the current and programmed robotic projects had not been reported on the DoD form 1498. It was, therefore, determined that a one-time robotic survey of all DoD agencies and activities should be performed. The results of this survey would serve as the primary input for the Director, USAHEL's presentation to the JTPR and would also be used to update the RAID. Since the in-house USAHEL resources were fully committed on other priority tasks that could not be deferred, Armament Systems, Inc. (ASI) was tasked to conduct the survey and to develop a number of statistical summaries that would provide an overview of the entire DoD tobotics effort to the JTPR.

### CBJSCTIVE

The objective of the task was to gather information on all of the research and development projects for the Army, Navy and Air Force, as related to robotics, and to develop an overview of the entire DoD robotics program, as well as some insights into any voids or duplications of effort.

#### DEFINITIONS/EXPLANATIONS

Because of the rapidity with which the robotic technology is expanding, new terms and applications are applicating in the literature almost on a daily basis. One can find any number of different versions of the basic definition of robotics, depending on whether it is being defined in terms of a manufacturing process, a general functional application or a military systems

application. Therefore, for a better understanding of the information contained in this report, the following definitions and program explanations are provided.

Mobot. A system incorporating a computer controller to provide autonomy and reprogrammability which incorporates an end effector of some type (manipulator arm or mobile platform) which exhibits flexibility in the roles which it can perform or the equipment with which it interfaces, and which performs tasks of a complexity level which previously required human control.

Artificial Intelligence. The part of computer science that is concerned with symbol manipulation processes that produce intelligent action. By "intelligent action" is meant an act or decision that is goal oriented, arrived at by an understandable chain or symbolic analysis and reasoning steps and is one in which knowledge of the world informs and guides the reasoning.

Robotic Component Technologies. The application of scientific study and experimentation to specific parts, assemblages and interfaces of a robotic system which performs the basic robotic functions of intelligence, movement and control. Component technology areas can be subdivided into the following categories:

- Manipulators. Multi-degree of freedom structures designed to move materials, tools, or sensors through space and includes kinematic optimation techniques, selection of optimum materials and efficient actuators.
- End Effectors. Provide the means of interacting with work pieces--flexibile, multifunctional. "SMART", i.e., sensor equipped grippers will provide most utility. The end effector is that end of arm tooling that the robot manipulates.
- Sensors. The devices such as photoelectric cells that receive and respond to the voice, touch or vision stimuli of a robotic system. Emphasis on means of reducing dependence on a structured working environment (includes acoustic ranging, touch, and force-torque).
- Mobility/Navigation. Concerned with the means of locomotion such as wheels, tracks, legs, which can include navigation systems, which incorporate sensor-based information to enable route planning or adhere to previously planned routes.
- Control. Controls are micro electronics based which provide means of autonomous action directly interfaced with actuators, servos, i.e., capacity for pre-programming provides means of interface with operator or higher echelons of control. They incorporate the capacity to accommodate to environmental change through processing of sensor-based information. The key

feature is the control of manipulator structural dynamics.

- Soldier/Machine Interface. Optimization of operator interface includes task allocation between operator and robot. It includes implementation of teleoperation, supervisory control (remote management) or fully autonomous, strategies information display. Maintainability and self diagnostics are critical features.
- Power Sources. Concerned with efficient sources of electrical or hydraulic power for extended duty cycles. Optimum interface with existing battlefield power sources and impact on logistics system are important considerations.
- Survivability. Survivability considerations include a widerange of ECM-ECCM-EMP resistant techniques and operational considerations. Robotic systems will require new survivability initiatives to maximize potential combat effectiveness gains from systems with very significant on-board computational capability and (with AL) decision making. Materials handling systems entail initiatives on hydraulics and servo control.

Robotic Technology Applications. The end use to which the technology is put. Within the Army, robotic technology is subdivided into the following major requirements categories.

- Autonomous Vehicles With an autonomous and navigation capability. This application requires vision significant developments in vision technology, as artificial intelligence for route planning and the accommodation of unexpected contingencies. These capabilities are significantly beyond the current state of the art. This is one of the reasons why the Defense Advanced Research Projects Agency (DARPA) selected autonomous vehicles as a test bedding area. Once developed, these systems will have a wide range of potential applications, but their dependence on technology, which is well beyond the present state of the art, removes them from serious consideration as near-term transition from tech base candidates. In the near term, teleoperation (remote control) has been proposed as an accessible alternative; however, the viability of the C' link to the vehicle is highly tentative, and, in the case of tethered systems range, is severely limited. In any event, opportunities for systems of the teleoperated type more clearly appear in the Battlefield Systems category and will be addressed there.
- Materials Handling Systems Field Oriented. Tech base requirements for robotic materials handling systems exist in areas such as sensor systems which will permit accommodation to environmental uncertainties, e.g., part positioning orientation, object recognition, etc. These requirements, though substantially more severe than the parallel requirements in the industry, are

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made less risky due to the opportunities to conscrain problem areas, e.g., one can program a vision system to recognize relatively limited set of ammunition rallets in all stable configurations. Similar requirements for structural optimization of robot manipulators and grippers, as well as system computer Technology to support controllers, exist. most application requirements is either currently available (may still present system integration challenges) or could be developed at low to moderate risks through a focused tech base effort. These systems share a virtually common ground within the group tech base, i.e., the tech base to support an ammunition handling system would also be directly supportive of NBC decontamination applications and vehicle refueling systems. Additional tech base issues include multifunctional end effectors (grippers), manipulator optimized kinematically and dynamically (incorporating designs advanced composite materials for improved payload to weight ratios), and integrated actuators to increase system efficiency, and reduce weight and vulnerability.

Battlefield Systems. Interest in the Battlefield Systems category should focus on systems without requirements autonomous platforms. The high risk tech base required autonomous vehicles properly places these systems in a separate category. A variety of non-autonomous vehicle based systems have been proposed and found to have substantial bases of interest, if not funding, in the Navy and Air Force. Army interest in these systems has focused on applications which involve teleoperation of heavy combat engineer vehicles for mine clearing operations (of which the ROBAT vehicle is a prime example) or much smaller systems, fixed or mobile, with a light weapon and/or payload. The tech base for these systems is more diverse than that required for either of the above categories and is low to moderate risk in nature, depending on the specific application. Some of the key technical issues involved include low cost all weather vision, compact energy sources, fire control and discipline and moving target indicators. Many of the intermediate milestone products which are produced through the programs associated with the Autonomous Vehicle program will find application in the e.g., advanced teleoperators and path Battlefield Systems, Battlefield Systems navigation assistance. The planning provides more appropriate test-bed application category opportunities for these stepping stone technologies than the Autonomous Vehicle category since, if proven on a well chosen system with end item transition potential, transition into system acquisition can be expedited. This is in contrast to proposed autonomous vehicle technology demonstrations on systems which are developed as test-bed end items.

A key technical consideration which spans all three application categories is the assessment of man-machine task/function allocation. The appropriate apportioning of tasks to autonomous subsystems and system operators will ensure the

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earliest possible transition from the tech base. The systems with requirements for the highest level of autonomy require the most tech base work and require substantially greater research and development resources and development times than those which, when feasible, utilize human operator involvement. Supervisory control (whereby an operator exerts direct control over a system only in the event of nonprogrammed contingencies) is a critical feature of optimum resolution which is a prerequisite for the most efficient pooling of operator and machine capabilities. Trade-off analyses based on these parameters will govern fielding costs and development times for the foreseeable future.

Industrial Applications. The current robotics technology effort within the US Air Force is oriented entirely towards the industrial applications, particularly the maintenance and repair of aircraft. The US Navy program is also focused primarily on manufacturing and includes several major robotic projects oriented the cleaning, repair and maintenance of ships and submarine hulls and operating equipment. Within the AMC, robotics is managed within application of Manufacturing Methods and Technology (MAN TECH) program and is oriented primarily towards the depot maintenance activities. It represents approximately 13% of the AMC Robotics Program. Table 1 shows the industrial applications funding by Service by fiscal year.

TABLE 1
Industrial Applications Funding By Service
By Fiscal Year (Dollars In Thousands)

Service	FY84	FY85	<b>788</b>	FY87	FY88	FY89
Army	206	405	317	550	0	0
Ravy	5,325	4,500	40,551	800	0	0
Air Force	12,741	9,648	8,776	4,068	2,000	2,000

## METRODOLOGY

The Statement of Work called for a query of the Navy RAID, Defense Technical Information Center (DTIC) and NASA Technical Information Analysis Centers to obtain DoD Form 1498 and related information from such sources relative to the Army, Navy, and Air Force Research and Development efforts in robotics, including past, current and planned projects. These data were to be filtered to weed out that information pertaining purely to AI which was to be excluded from the effort. The data were then to be reviewed and clarified through personal visits and/or telephone discussions

with the data sources concerned.

Because of the results of the sampling of the RAID data base and based on a review of the information provided through a query of DTIC, it was determined that a onetime survey of the Services would be required to obtain a current and complete status of all robotic surveys. A survey form was developed, coordinated with USAHEL and forwarded to the Services for completion. The data resulting from this survey was used as the primary source for information which is contained in this report. The information was entered into a computer data base developed by ASI and the output of this program was used to develop the management displays and briefing charts which follow.

## SCOPE OF SURVEY

Within the US Army, survey forms were forwarded to the four AMC corporate laboratories, the Army Research Office, the 27 separate major subordinate command laboratories, the Test and Evaluation Command, the Medical R&D Command, the Engineer Topographic Laboratory, the Development and Deployment Agency, and the Defense Advanced Research Projects Agency for a total of 39 requests for completion of Survey forms. Responses were received from 37 organizations which represents a 95% response. Replies were not received from the Atmospheric Sciences Laboratory, White Sands Missile Range, NM, or the Electronics Technology and Devices Laboratory, Ft. Monmouth, NJ.

Survey forms were also forwarded to central points of contact for the US Navy, the US Marine Corps, and the US Air Force.

Appendix A contains a copy of the survey form and instructions for its preparation. Appendix B contains a copy of each of the Army, Navy, and Air Force individual computer printouts. TAB B-1 contains a summary printout of total Army financial data followed by individual summaries of projects and tasks by designated technology areas and technology application areas. Inasmuch as the Army portion of the survey results was also planned for use by the USAHEL as input for a briefing to the Commanding General for Research, Development and Acquisition, AMC, separate printouts were also provided for each performing AMC organization, to include the major AMC subordinate commands and the separate corporate laboratories. A listing of each robotic project/task by each AMC organization was also provided and is included as part of TAB B-1.

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TAB B-2 contains a summary printout of the total US Navy portion of the survey, including a financial summary followed by individual summaries of projects and tasks by designated technology and technology applications and TAB B-3 contains similar information for all US Air Force robotics projects.

## RESULTS AND DISCUSSION

As shown in Table 2, a total of 32 separate organizations, excluding DARPA, are presently working on 95 separate projects. DARPA funded projects are shown as part of the respective military Services' submissions.

TABLE 2
Scope of Survey

Service	No. of Organizations W/Robotic Projects	No. of Project Reports Received
Army	18	52
Nevy	9	27
Air Force	5	16 .

Table 3 is a list of military Service organizations with active, ongoing robotics projects.

Figures 1 through 8 are a series of DoD funding projections by total In-House versus Contract; Technology Base versus System Specific by Service; Research, Development, Testing and Evaluation (RDT&E) Funding Categories; Technology Base versus System Specific; Percent Effort in FY35 stratified by Component Technology; Robotic Component Technologies stratified by Service; total DoD Technology Applications for FY85 projects, and 1985 robotics projects broken out by primary technology applications by Service.

Figures 9 through 18 provide similar displays of robotics projects for the AMC plus a separate portrayal of Manufacturing Methods and Technology (MMT) funding.

TABLE 3
Military Service Organizations
With Ongoing Robotic Projects

Army	Navy	Air Force
USA Electronics R&D Cmd. Night Vision & Elec. Opt. Lab. Signal Warfare Center Combat Surv. & Tgt. Acqu. Lab. USA Missile Command Lab. USA Troop Support Cmd. Belvoir R&D Ctr. USA Tank-Automotive Cmd. Systems Lab. Concept Lab. USA Aviation Systems Cmd. PM RPV Program Applied Tech. Lab. USA Armament, Mun. & Cml. Cmd. Armament R&D Center Chemical R&D Center USA Commo. & Elec. Cmd. Ctr. for Communications US Army Research Office USA Medical R&D Command USA Engr. Topo. Lab. USA Dev. & Employment Agcy. USA Human Engr. Lab. USA Matls. & Mechs. Res. Ctr.	Naval Sea Systems Cmd. Naval Air Systems Cmd. Naval Ocean Systems Ctr. Naval Research Lab Naval Surface Wpns. Ctr. Naval Coastal Sys. Ctr. Naval Post Grad. School Naval Weapons Centar USMC Dev. & Ed. Cmd.	USAF Systems Cmd.  USAF Rocket Propulsion Lab, Edwards AFB USAF Ofc. of Scientific Research USAF Wal/MLTC Wright- Pat. AFB USAF Armament Div., Eglin AFB Hanscom AFR, Mass.

# DOD ROBOTICS PROJECTS

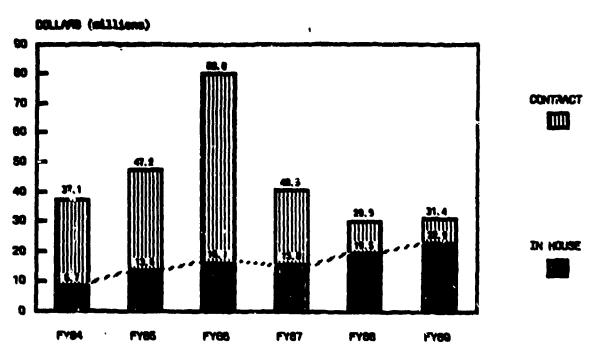


Figure 1. Total R&D Robotic Funding--In-House Versus Contract.

# DOD ROBOTICS PROJECTS

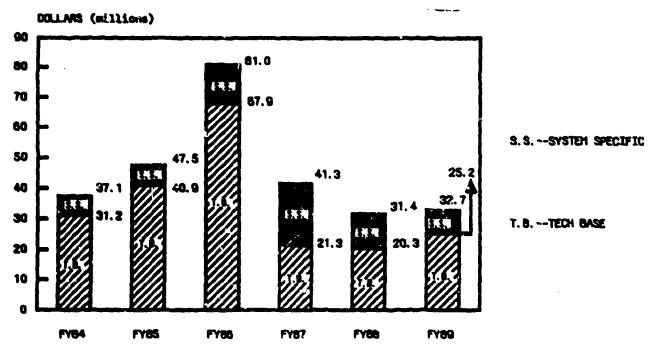


Figure 2. Total DoD Technology Base Versus System Specific.

# DOD ROBOTICS PROJECTS

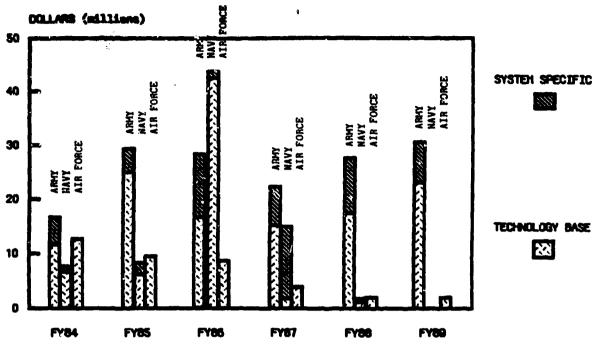


Figure 3. Technology Base Versus System Specific By Service.

# DOD ROBOTICS PROJECTS

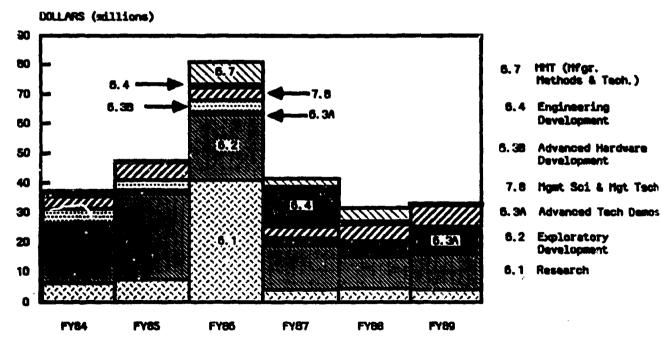


Figure 4. Total DoD RDT&E Funding Categories.

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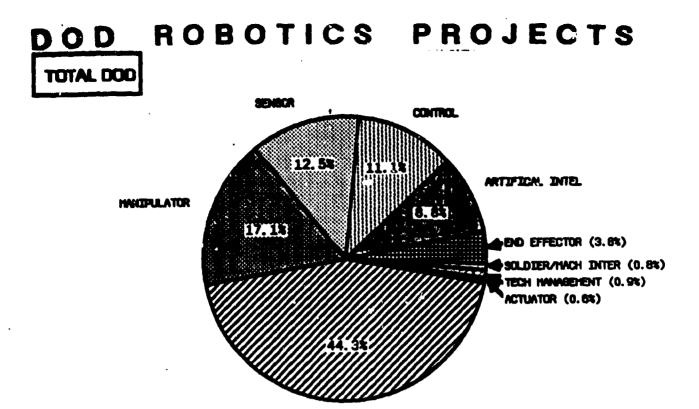


Figure 5. Component Technology (Percent Effort FY85).

# DOD ROBOTICS PROJECTS

HOBILITY/NAVIGATION

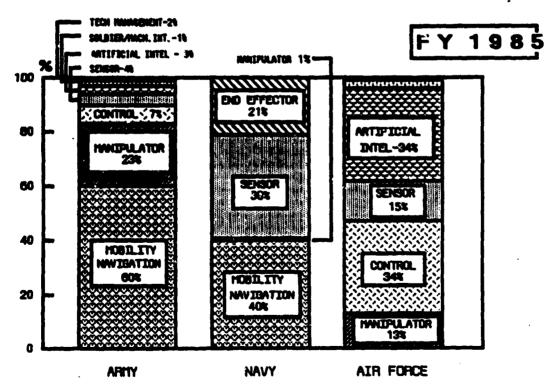


Figure 6. Robotic Component Technologies By Service.

# ECHNOLOGY APPLICATIONS

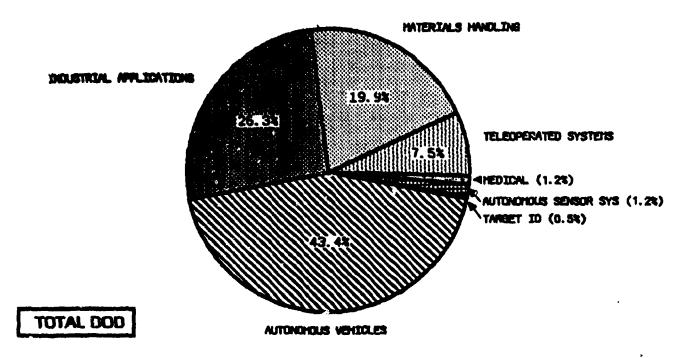


Figure 7. DoD Technology Applications -- 1985 Projects.

# DOD ROBOTICS PROJECTS

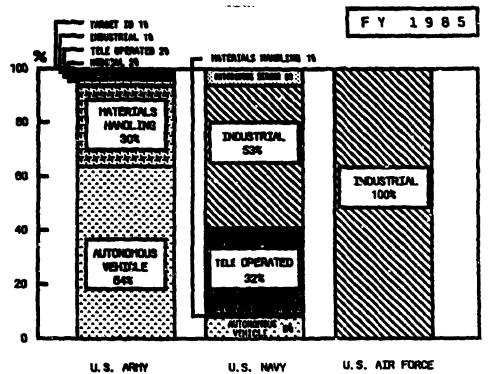


Figure 8. Primary Technology Applications By Service.

# AMC ROBOTICS PROJECTS

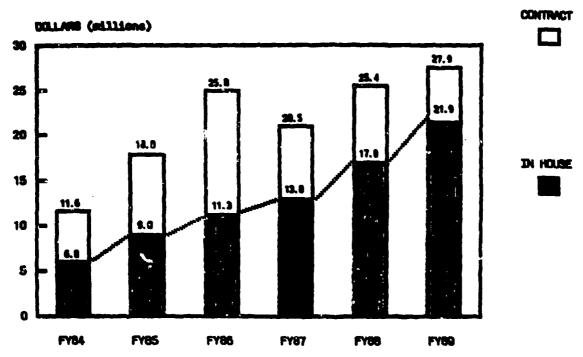


Figure 9. AMC Robotics Projects--In-House Versus Contract.

# AMC ROBOTICS PROJECTS

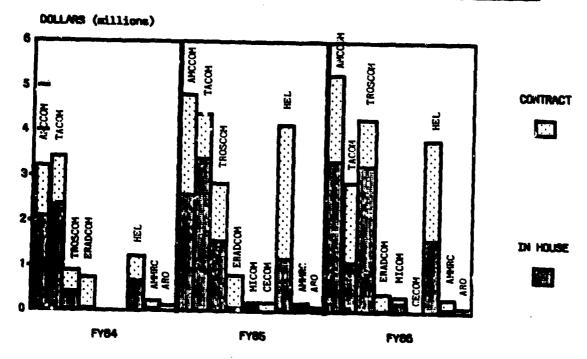


Figure 10. AMC Robotics Projects--In-House Versus Contract--MSC Breakout.

# AMC ROBOTICS PROJECTS

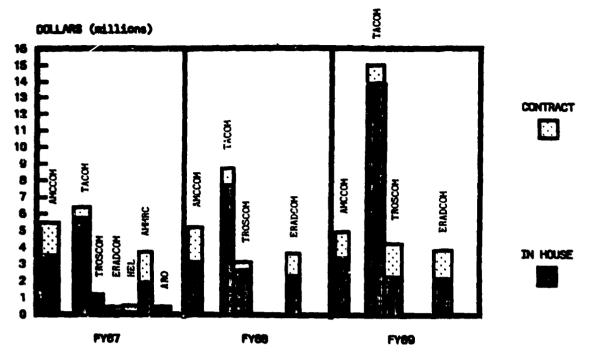


Figure 11. AMC Robotics Projects--In-House Versus Contract--MSC Breakout (Cont'd.).

# AMC ROBOTICS PROJECTS

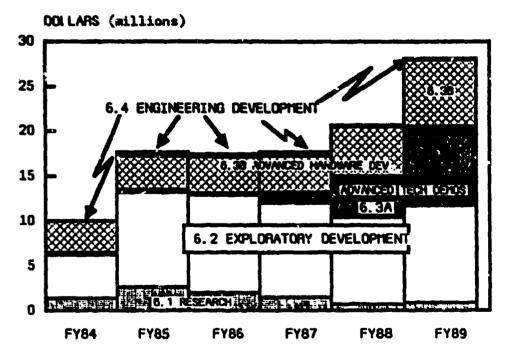


Figure 12. AMC Projects By RDT&E Funding Categories.

# AMC ROBOTICS PROJECTS

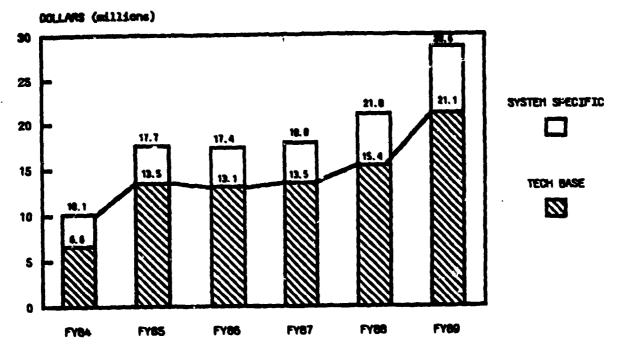


Figure 13. AMC Robotics Projects--Technology Base Versus System Specific.

# COMPONENT TECHNOLOGY

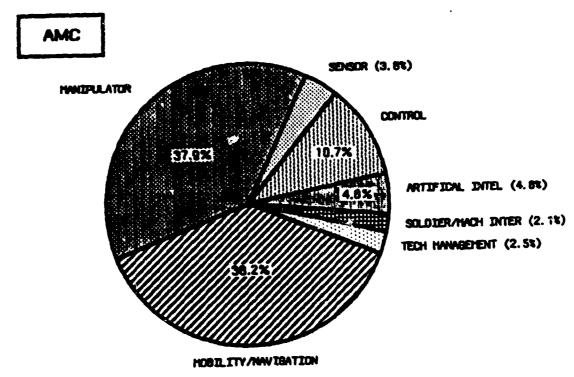


Figure 14. AMC Component Technology Percent Effort--FY85 Projects.

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# TECHNOLOGY APPLICATIONS

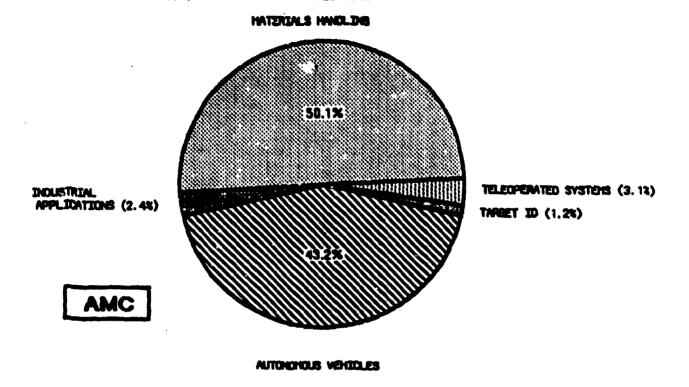


Figure 15. AMC Technology Applications (FY85 Projects).

# AMC ROBOTICS PROJECTS

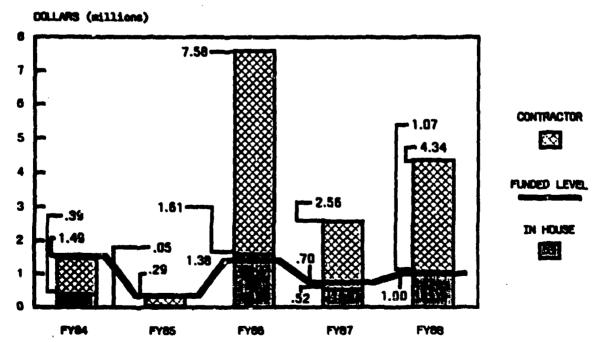


Figure 16. MMT Funding--AMC Robotics Projects.

# ROBOTICS MMT FUNDING

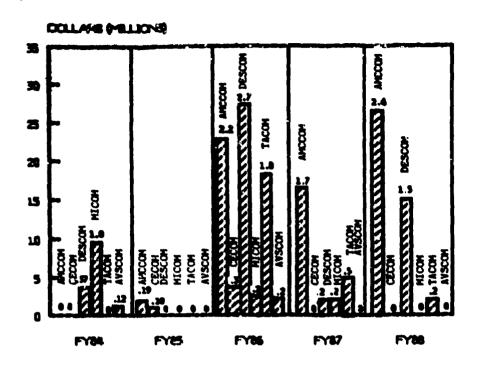


Figure 17. MMT Funding By AMC Major Subordinate Commands.

# AMC ROBOTICS PROGRAM

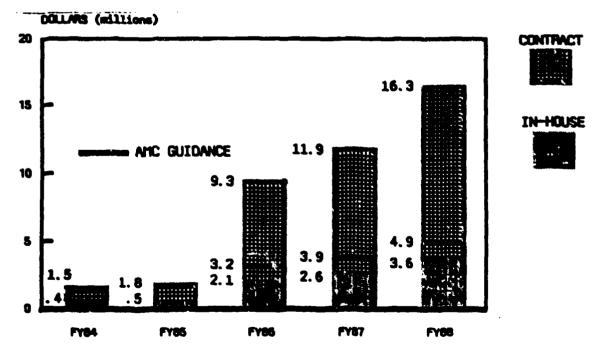


Figure 18. MMT, Cummulative Funding, AMC Robotics Projects-In-House Versus Contract.

Table 4 is a project title listing of Joint-Service projects with lead and supporting Service(s) as shown.

TABLE 4

Joint Service Projects

Reference Number	Project Title
A-85-20	Multimission Robotics - Light Mobile Robotic System (LMRS). Lead: US Army, Supporting: US Navy.
N-84-12	Robotic Microwave Hybrid Substrate Assembly. Lead: US Navy, Supporting: US Air Force.
N-94-17	Laser Paint Stripper. Lead: US Navy, Support- ing: US Air Force and US Army.
N-84-18	Automated Aircraft Paint System. Lead: US Navy, Supporting: US Air Force.
N-85-26	Advanced Teleoperators. Lead: US Marine Corps, Supporting: US Navy and US Army.
F-85-13	General Purpose Robotic System. Lead: US Air Force, Supporting: US Army.

One of the questions on the survey form asked whether or not a DoD Form 1498 had been completed for each robotic project. It was interesting to note that out of the 52 project submissions by the US Army, only 24 or 46% reported that the required DoD Form 1498 had been completed. Of the 27 projects reported by the Navy, DoD Form 1498 had been completed on only 5 or 19%. None of the 16 projects reported by the US Air Force had the required DoD Form 1498 submitted.

## SUMMARY OF SURVEY PINDINGS

Although the referenced task did not include a requirement for reporting any survey conclusions or recommendations, it was interesting to note that:

Of the Army's 52 robotics projects, only two are funded in FY85 at a level in excess of one million dollars and only four in FY86.

- There is an apparent wide interest in autonomous-teleoperated vehicles in that there are 14 separate AMC projects in PY85 for a total funding of \$7.1 million which are concerned with autonomous-teleoperated vehicles.
- Of the 52 projects reported by the Army as active during the period 1984-1989, only nine projects show transition funding into 6.3B Advanced Hardware Development by FY89 and only three show 6.4 Engineering Development funds, which total only \$1.3 million, or less than 18 of the \$133.9 million total AMC robotics program FY84 FY89.
- Based on a cursory review of the individual robotic survey submissions, there is an apparent overlapping of test bed efforts.

## LESSONS LEARNED

- Based on the small number of projects (29 out of 95) wherein it was reported that DoD Form 1498 had been completed, as required by DoD Directive 7720.13, it is a very unreliable and misleading indicator of the robotics projects being performed by the military Services.
- Based on the extensive delays experienced in the completion of the survey forms by all three Services, notwithstanding the extensive follow-up effort put forth, it is apparent that future surveys to update the robotics data base will be ineffective and inefficient. Since the DoD Form 1498 is also ineffective as a source of information for updating a robotic data base, an alternative would be to establish a recurring report to obtain the specific data input requirements needed for the continued effective management and control of the DoD robotics program.
- Inasmuch as many technology base projects provide support to several basic technology areas, as well as having multitechnology applications, an improved taxonomy methodology is required to properly catalogue the projects so that they will be more supportive of robotic literature searches for related robotics work.
- Although the originally designed computer software program outputs were responsive in terms of satisfying the management display requirements, it has been determined that with minor modifications, significant improvements in providing timely ancillary information in support of management needs can be provided. These software modifications, when interfaced with a graphics program will make possible the permodic publication of technical progress and information report to enhance the robotics program decision making process at all levels of management. Armament Systems, Inc. (ASI) has started to make these software modifications and should have

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them completed in the near future.

## PUTURE CONCIDERATIONS

- A. If the Director, USAHEL is to serve for another year as Chairman of the JTPR, immediate action is required to obtain approval for a recurring report to provide timely information required by the JTPR to fulfill the requirements of its charter, i.e., identification of program duplications and overlaps, identification of program voids, and the indentification of programs of questionable value in terms of satisfying high priority weapons and system requirements.
- B. Whether or not the HEL Robotic Integration Center (ROBIC) data base is to include information for other Services in support of any suggested actions taken, stated in the previous paragraph, or be limited to AMC projects, there is a need to incorporate TRADOC requirements information in support of the AMC RDTLE robotics projects. Only then can the proper management control be maintained.
- C. If future ROBIC activities are to include information in support of JTPR chartered functions, recommend immediate action be taken to establish a procedure (recurring report or similar requirement) for obtaining timely information on all of the Services' robotics activities, as well as an awareness of current and planned robotics projects of other federal departments.
- D. If future ROBIC activities are to be limited to the AMC robotics projects, future contractor support should be accomplished as a task under the existing contract.
- E. If, as a result of ongoing robotic briefings, it is determined that future management briefings will be required on a continuing basis, a requirement should be identified for a set of standard briefing charts so that the data input requirements can be developed and a computer graphics program refined to provide timely information with minimum expenditure of time and effort.
- F. Inasmuch as several agency and activity letters which transmitted robotic survey data requested feedback, in terms of overall program status be provided, recommend this be accomplished as a priority effort as a means of encouraging improvements in support of future robotic program efforts.

## APPENDIX A

Survey Form and Instructions

## ROBOTICS PINGRAM SURVEY

PROJECT TITLE:				2. PI	ROJECT NO.	
TASK TITLE		<u> </u>		4. SI	EC. CLASSI	F
Performing Organization	tion (Serv	ice, Comm	and/Agenc	y)		
Address:	<u> </u>	·				
Telephone Numbers	: Autovon:			Commerc	ia1:	
Principal Investig	ator's Name	·				
Address:					<del></del>	
Telephone Mumbers	: Autovon:		· · · · · · · · · · · · · · · · · · ·	Commerc	ial :	**************************************
FYDP Funding (RDT	BE)	Thousan	ds (000)	of Dolla	rs	
	FY 84	FY 85	FY 86	FY 87	FY 88	FY 89
6.1				ميكيني		-
6.2					-	-
6.3 A			· ·			•
6.3 B						
6.4						
FYDP Funding (6.1-	6.4)					
In House						
Contract						
In House Man Years						
Unfunded: (Funds	requested [	or planne	d] but ap	proval n	ot yet rec	eived [6.1-6
In House				-		
Contract						
List the appropria	te componen	t technol	ogy that	this tas	k falls un	ider (6.1-
6.3A only) (see E	nclosure 1.	for list	of techn	ologies)	·	4-1 <del>7</del>
List the appropria Enclosure 1. for			_			
Has this project b Work Unit Summary and latest revisi	? ( ) yes on date	, ( ) no	. If yes	, provid	e Accessio	on No
Is this a Joint Se	rvice proje	ct? ( )	yes, (			
If funds for this amount of the fur	• •	_	•	ject	,	PA, indicate
_	,		•	7	amount)	(percent)

USE ADDITIONAL SHEETS IF REQUIRED. Page A-3

## Robotic KEYNORD List

ACTUATOR
ARTIFICIAL INTEL
CONTROL
END EFFECTOR
MANIPULATOR
MAN/MACH INTERFACE
MOBILITY/NAVIGATION
SENSOR

BATTLEFIELD SYS

COUNIERMINE VEHICLE
EXPL ORD DISPOSAL
FIRE FIGHTING
INTELLIGENT MINE
MINEFIELD OPERATIONS
NBC DECONTAMINATION
NBC RECONNAISSANCE
REMOTE SENSOR STA
REMOTELY ACTIV WPN
SENTRY ROBOT
SHIP REPAIR
SHIPBOARD OPERATIONS
SMART MUNITIONS
TACT RECONNAISSANCE

INDUSTRIAL APPL
CLEANING/PAINTING
CUTTING/WELDING
DERIVITING
DESIGN
DIAGNOSTIC
FABRICATION/ASSEMBLY
INSPECTION
QUALITY CONTROL

MATERIAL HANDLING
AMMUNITION RESUPPLY
AUTO AMMO SUP POINT
CARGO HANDLING
CARGO LOADING
REFUELING

STUDY/SURVEY
SHIPBOARD APPL

TRAINING

# U.S. ARMY HUMAN ENGINEERING LABORATORY ROBOTIC INFORMATION SYSTEM

# DESCRIPTION OF MODULE INPCHK OUTPUT

LABEL	DESCRIPTION 非正常社会社会主要的企業的主要的企業的企業的企業的企業的企業的企業的企業的企業的企業的企業的企業的企業的企業的
REFERENCE No.	Generated by ROBOTIC INFO. SYSTEM
KEY No.	Key numbers corresponding to Keywords (see enclosed sheet)
PROJECT Title	Self Explanatory [SE]
PROJECT No.	As assigned by the Performing Organization
CLASSIFICATION	SE
TASK Title	SE
PERFORMING ORG.	SE
PO ADDRESS	₽E
FUNDING	SE
MAN YEAR(s)	In-house reported for FY84-FY89
WORK UNIT SUM	Accession Number and latest revsion date "###" indicates that none has been reported
JOINT PROJECT	Joint Service Project; A - ARMY N - NAVY F - AIR FORCE
	First letter in field = LEAD Service Remaining letter(s) = SUPPORT Service "+++" indicates single Service Project
DARPA Funding	\$ (in thousands) and Percentage of Project's funding

## APPENDIX B

Robotic Survey Individual Computer Printouts

TAB B-1. Summary Printout: Army

TAB B-2. Summary Printout: Navy

TAB B-3. Summary Printout: Air Force

# U.S. ARMY HUMAN ENGINEERING LABORATORY ROBOTIC INFORMATION SYSTEM

15-MAR-85 12:05:38

MODULE: INPOHY

SERVICE: APMY

REFERENCE No: 14-85- 1:

KEY No: 11 | 143: 1 0:

PROJECT Title: !AI/ROBOTICS SPF

PROJECT No: 11L161102AH51CA :

CLASSIFICATION: !UC!

TASK Title: !SENSORS/ROBOTICS/AI

PERFORMING ORG: !TROSCOM

PO ADDRESS: !BRDC FT BELVOIR VA 22060-5626

FYDP FUNDING [ RDT&E ] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	F\83
6.1	212	371	. 343	<b>පළ</b> ණ	4ወወ	425
6.2	<b>(</b> 2)	12)	Ø	0	<b>'</b> Z'	9
6. 3A	<b>1</b> 25	Ø	Ø	₽.	2	27
6.3B	Ø	Ø	Ø	₹ 20	Ø	Ø.
6.4	Ź,	Ø	Q5	73	Ø	<b>©</b> i

FYDP FUNDING [ 6.1-5.4 ] (\$ in THOUSANDS)

	FY84	FY85	FY86	EAUA	EABB	EA93
IN-H	212	127	127	127	127	:27
CCNT	Ø	244	21 <b>6</b>	193	273	238

UNFUNDED [ 6.1-6.4 ] (\$ im THOUSANDS)

	FY84	FY85	FY86	FY87	FYSS	FY89
IN-H	<b>Ø</b> .	Ø	97	Ø	20	9)
CONT	<b>Ø</b>	Ø	Ø	Ø.	Ø	Ø

MAN YEAR(s): | 0.0| | 1.5| | 1.5| | 1.5| | 1.5| | 1.6| | WORK UNIT SUM: |

JOINT PROJECT: 1+++1

DARPA Funding: ! 01 ! 0.01

## U.S. ARMY HUMAN MENGINEERING LABORATORY

#### ROBOTIC INFORMATION SYSTEM

15-MAR-85 12:05:58

MODULE: INPCHK

SERVICE: ARMY

REFERENCE No: KEY No: PROJECT Title: PROJECT No: CLASSIFICATION: TASK Title: PERFORMING ORG: PO ADDRESS: FYDP FUNDING C	IBRDC FT BE	ØXS   ENSORS TE LVOIR VA	22060-5606		1
FY84	FY85	FY86	FY87	FYSS	
6.1 0 6.2 0	Ø 375	0 154	<b>@</b> 168	ହ 27 <b>ଡ</b>	•

	F 784	F 485	F 486	FTB/	F 156	LAD.:
6. 1	0	Ø	ø	Ø.	Ø	. 6
6.2	0	375	154	168	270	380
6. 3A	0	Ø	0	0	0	Ø
6.3P	Ø.	Ø	Ø	•	Ø	Ø
6.4	0	6	0	0	0	0

FYDP FUNDING [ 6.1-6.4 ] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
IN-H	0	85	154	168	150	200
CONT	0	236	0	0	120	180

UNFUNDED ( 6.1-6.4 ) (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
IN-H	Ø	Ø.	Ø	2	ø	<b>2</b> /
CONT	Ø	Ø	20	Ø	Ø	Ø

MAN YEAR(s): | 0.0| | 1.0| | 1.0| | 1.0| | 2.5| | 3.0| WORK UNIT SUM: | | | | | | |

JOINT PROJECT: 1+++1

DARPA Funding: | 0| | 0.0|

# U.S. ARMY HUMAN ENGINEERING LABORATORY

### ROBOTIC INFORMATION SYSTEM

15-MAR-85 12:06:20

MODULE: INPCHK

SERVICE: ARMY

REFERENCE No: KEY No: PROJECT Title: PROJECT No:	10-85- 31   81   91   171  SUPPLY REDISTRIBUTION   11627330H20GS	
CLASSIFICATION: TASK Title: PERFORMING ORG:	IUCI IREPALLETIZER, BOXED AMMUNITION ITROSCOM	; 1
FD ADDRESS:	IBRDC FT BELVOIR VA 22060-3606	•

#### FYDP FUNDING [ RDT&E ] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
6. 1	0	ଡ	ø	æ	ø	0
6.2	0	751	920	1200	0	Ø
6. 3A	0	0	0	0	2	6
6.3B	0	Ø.	0	•	Ø	Ø
6.4	0	2	0	Ø	Ø	Ø

## FYDP FUNDING [ 6.1-6.4 ] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
IN-H CONT	· @	751 @	92 <b>0</b>	1200 0	Ø Ø	@ @

### UNFUNDED [ G.1-6.4 ] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FYBB	FY89
IN-H	0	Ø	ø	Ø	Ø	<b>ø</b> .
CONT	8	Ø	0	Ø	0	Ø

MAN YEAR(s): | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01

JOINT PROJECT: 1 +++1

DARPA Funding: | 0| | 0.0|

## U.S. ARMY HUMAN ENGINEERING LABORATORY

ROBOTIC INFORMATION SYSTEM

15-MAR-85 12:06:41

MODULE: INPCHK

SERVICE: ARMY

REFERENCE No:

KEY No: PROJECT N	No:	5    9   LOGISTICS  63726DG142				
CLASSIFIC TASK Tit!	le:	IBATTLEFTEL ITROSCOM	D ROPOTIC	AMMUNITION	SUPPLY	1
PO ADDRES		IBRDC FT BE	LVOIR VA	22760-5606		
FYDP FU!	NDING C	RDT&E J (\$	in THOUSAN	(SQ		
	FY84	FY85	FY86	FY87	5488	. FYB9
6. 1	ø	Ø	Ø	Ø	9	6
6.2	Ø	ø	Ø	Ø	20	Ø
6. 3A	0	Ø	Ø	Ø	Ø	ଉ
6. 3B	Ø	6	Ø.	Ø	2400	5557
6.4	8	8	Ø	Ø	Ø.	Ø
FYDP FU	DING [	6.1-6.4 J	s in THOUS	SANDS)		
	FY84	FY85	FY86	FY87	FYBB	FY89
IN-H		0	0	e	24ଉଡ଼	5357
CONT	0	Ø.	6	Ø	Ø	0
UNFUNDE	D C 6.1	-6.4 ] (\$ ir	THOUSAND	3)		
	FY84	FY85	FY86	FY87	FY#S	FY89
IN-H	0	Q	Ø	Ø	Ø	e
CONT	Ž.	ē	20	Ø	8	e
	T SUM:	1 0.01   0.  +++++++++++   0!	***     ****	ነ ଫ. ውነ : ወ *****	.ସା   ୧.ଘା	

# U.S. ARMY HUMAN ENGINEERING LABORATORY ROBOTIC INFORMATION SYSTEM

15-MAR-85 12:07:03

MODULE: INPCHK

SERVICE: ARMY

REFERENCE KEY No: PROJECT T PROJECT N CLASSIFIC TASK Titl PERFORMIN PO ADDRES	itle: lo: :ATION: .e: !G ORG:	IA-85- 51 I BI I 91 ISUPPLY DIST I1L2733AH20G IUCI IREPALLETIZE ITROSCOM IBROC FT PEL	S I	_	: :	
FYDD FUN	DING C	RDT&E J (\$ i	n THOUSAN	4DS)		
	FV84	FY85	FY85	FYB7	FY88	FY <b>8</b> 9
	_	•	Ø	Ø	0	<b>Ø</b>
6. 1	Ø	9	ě	á	0	0
6.2	Ø	ଞ୍ଜ	8	Ø.	0	91
6. 3A	e	2	ě.	ě	- 20	Ø
6. 3B	. 0	<b>2</b> .		2	ā	Ø
5. 4	Ø	0	Ø	ů.	•	
FYDP FU	DING C	5.1-6.4 J (1	FY86	SANDS) FY87	FY88	E887
	_		ø	Ø.	8	0
IN-H	20	50	9	ä	0	Ø.
TNr.	₽.	8	<b>4</b> C)	•	•	•
UNFUNDE	D C 6.1	-6.4] (\$ in	THOUSAND	S)		
	FY84	FY85	FY86	FY87	FY88	FY89
	_		ર	2	ø	Ó
IN-H	0	Š.	Ø.	Ø	Ö	<b>\$</b> 5
CONT	8	₹.	₩.	•	-	
MAN YEAR WORK UNI JOINT PR DARPA FU	T SUM:	1	61 1 0.01 1 1 0.01	1 20-20: 1	<b>ଡ଼</b> ିଆ । ଅ.ଅ	

#### U.S. PRMY HUMAN ENGINEERING LABORATORY

#### ROBOTIC INFORMATION SYSTEM

15-MAR-95 12:07:24

MODULE: INPCHK

SERVICE: ARMY

REFERENCE No: 19-85-6'
KEY No: 181 ! 91 117!
PROJECT Title: |LOGISTICS
PROJECT No: 163726DG1420 |
CLASSIFICATION: |UC|
TASK Title: |BATTLEFJELD ROBOTIC AMMO SUPPLY SYSTEM
PERFORMING ORG: |TROSCOM
PO ADDRESS: |BRDC FT RELVOIR VA 22060-5606

## FYDP FUNDING ( RDT&E ) (\* in THOUSANDS)

	FY84	FY85	FY86	5487	FY88	FY89
6. 1	0	Q	ø	Q	Ø	Ø
<b>6.</b> 2	0	e	Ø	Ø	Ø.	0
6.3A	0	0	Ø	Ø	Ø	er er
6. 3P	9	Ø	1500	3684	: ଡଡଡ	Ø
6.4	€	ଡ	Ø	ହ	ঞ	Ø

### FYDP FUNDING ( 6.1-6.4 3 (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY83
IN-H	<del>ଡ</del>	<i>ବ</i>	1600	3684	1 ଉଦ୍ଭ	<u>ଷ</u>
CONT	ହ	ବ	0	&	ଡ	ର

#### UNFUNDED [ 6.1-6.4 ] (\* in THOUSANDS)

	FY84	FY85	FYAS	FY87	FY88	FY89
IN-H	Ø	হে	Ø	20	Ø	Ø
CONT	0	0	0	Ø	Ø	Ø:

MAN YEAR(5': 1 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01

JOINT PROJECT: 1+++1

DARPA Funding: | @| | @. 4|

## U.S. ARMY HUMAN ENGINEERING LABORATORY

## ROBOTIC INFORMATION SYSTEM

# 15-mar-85 12:88:26

MODULE: INPCHK

SERVICE: ARMY

18-85- 7: 1 31 | 91

REFERENCE No:

REFERENC		H-82- 1:						
KEY No:		31 1 91	(17)					
PROJECT Title: ILOGISTICS								
PROJECT No: 164717DH1420 1 CLHSSIFICATION: NC:								
TASK Tit			NOUPB 81			1		
, . , ,		BRASS (CRU TROSCOM	NUMER P)			1 !		
PO ADDRE		BRDC FT BE	מט פוחטו	22060-5606		i		
FC FDDRK		D. 100 F 1 D. L.	210311 111					
FYUP FL	R 3 BNIGN	2) [ 357G	in THOUSAN	ופמו				
	FY84	FY85	FY86	FY87	FY88	. FY89		
6.1	•	Ø	9	ø	₹,	9		
6.2	0	Ø.	Ø.	20	Ø	Ø		
6.34	<b>Ø</b>	<b>⊘</b>	Ø	9	Q	ମ		
6. 39	8	2	20	9	Ø	825		
6,4	Ø	•	0	Ø	Ø	Ø.		
FYDP FL	NDING C 6	.1-6.4 3 (	s in THOUS	SANDS)				
	FY84	FY85	FY86	FY87	FY88	FY89		
IN-H	e	•	0	•	Ø	825		
CONT	9	<b>9</b> `	Ø	Ø	Ø	ø		
UNFUNDE	D : 6.1-6	.41 (* in	THOUSANDS	3)				
	EA8-7	FY85	FYBE	FY87	FY88	FY8S		
IN-H	6	<b>@</b>	ø	Ø	20	ø		
CONT	Ø	Ŷ.	Ø.	Ø	<b>⊘</b>	Ø		
MAN YEAR	) ( ma ) s = -1	0.0110.	a: ! a.a!	10.0110	. 201   20.01			
WORK UNI		*****		****				
JOINT PR		+++1			•			
DARPA FU	inding: 1	28' 1	0.01					

Page 8-8

15-MAR-85 12:10:05

MODULE: INPCHK

SERVICE: ARMY

1A-85- 81 1 31 | 91 | 01

REFERENCE No:

KEY No:

PROJECT PROJECT CLASSIFI	Title:   No:   CATION:	SUPPLY DIST	ngs i	IIFLITANU AMI		
TASK Tit PERFORMI	NB ORB:	AUTOMATED S TROSCOM		VENTURY CUI	AL HOL	t t
PO ADDRE	55:	BRDC FT BEL	LUDIR VA	55066-2666		
FYDD FU	NDING C F	RDT&E ] (* i	in THOUSAN	DS)		
	FY84	FY85	FY86	FY87	FYBB	FY89
6.1	0	<b>E</b> i	0	0	Ø	
6. 2	20	0	Ø	0	360	1500
6. 3A	2	Ø.	Ø	<b>©</b>	Ø	ହ
6. 3B	8	Ø	0	Ø	0	0
5.4	Ø	Ø	0	•	Ø	ର
FYDP FU	NDING C	6.1-6.4 3 (1	in THOUS	ANDS)		
	FY84	FYAS	E486	FYB?	FYBB	FY89
IN-H	0	•	8	Ø	360	1500
CONT	0	Q	9	Ø	Ø	0
UNFUNDE	D [ 6.1-6	i.4 2 (* in	THOUSANDS	)		
	FY84	FY85	FY86	FY87	FYBB	FY89
IN-H	Ø	Ø	0	0	0	ø
CONT	Ø	6	0	Ø.	Ø	ଉ
MAN YEAR WORK UNI JOINT PR DARPA Fu	T SUM: ! DJECT: !	0.01 1 0.0 ***********************************		@.@    @. *****	@1 1 <b>@.@</b> 1	

Page B-9

ROBOTIC INFORMATION SYSTEM

15-MAR-85

MODULE: INFCHK

SERVICE: ARMY

REFERENCE No: IA-85- 9!
KEY No: I 8! ! 9! !17!
PROJECT Title: |LOGISTICS
PROJECT No: I63776DG14XX |
CLASSIFICATION: |UC!
TASK Title: |ROBOTIC UNLOADER
PERFORMING ORG: |TROSCOM
PO ADDRESS: |BRDC FT BELVOIR VA 22060-5606

FYDP FUNDING C RDT&E 1 (\* in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY <b>89</b>
6. :	e	Ø	8	Ø	Ø,	. 0
6.2	•	Ø	Ø	₽.	•	. 6
6. 3A	8	Ø	<b>Ø</b>	Q.	0	Ø
6.3B	2	0	0	•	<u>ଅବସ୍ଥ</u>	1000
6.4	Ø	Ø	•	Q	20	ହ

FYDD FUNDING [ 6.1-6.4 ] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
IN-H	<b>0</b>	છ	&	Ø	ଅବନ୍ତର	1 ମହର
CONT		જ	Ø	Ø	ଅବନ୍ତର	ପ

UNFUNDED [ 6.1-6.4 ] (# in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
IN-H	6	0	e.	8	<b>@</b>	8
CONT	Ø	Ø	Ø.	Ø	<b>Q</b> 1	50

MAN YEAR(s); | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01

JOINT PROJECT: 1+++1

DARPA Funding: | @| | @.@|

15-MAR-85 12:10:48

MODULE: INPCHK

SERVICE: ARMY

REFERENCE No:	IA-85- 101
KEY No:	1 11  431   01
PROJECT Title:	ICOUNTERMINE SPF
PROJECT No:	11L161102AH51RN !
CLASSIFICATION:	l DUI
TASK Title:	IMINE NEUTRALIZATION RESEARCH
PERFORMING ORG:	ITROSCOM
PO ADDRESS:	IBRDC FT BELVOIR VA 22060-5606

#### FYDD FUNDING [ RDT&E ] (\* in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
6. 1	150	150	100	90	150	<b>9</b> 3
6. a	6	Ø	<b>(9</b> )	Ø	Ø.	0
6.3A	29	Ø	23	2	0	Ø
6. 3B	6	0	9	<b>Q</b>	Ø	Ø.
6.4	Ø.	2	0	Ø	Ø	Ø

#### FYDP FUNDING [ 6.1-6.4 ] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FYA9
IN-H	29	30	30	20	30	20
CONT.	121	120	70	7Ø	180	73

#### UNFUNDED [ 6.1-6.4 ] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	EV89
IN-H	8	Ø	Ø	<b>ହ</b>	<b>ଫ</b>	ହ
CONT		@	3	ହ	ଫ	ହ

MAN YEAR(+): | 0.4| | 0.4| | 1.2| | 0.3| | 0.4| | 0.3| 1 1

WORK UNIT SUM: I

3 A

JOINT PROJECT: |+++|
DARPA Funding: | 0| | 0.0|

ROBUTIC INFORMATION SYSTEM

15-MAR-85 12:14:02

MODULE: INPCHK

SERVICE: PRMY

PO ADDRES	Title: No: CATION: Le: NG ORG:	IA-85- 111 I 11 143! IMINE NEUT! I1L62733AH: IUCI ICOUNTERMI! ITROSCOM IBRDC FT BE	20NN I NE ROBOTIC ELVOIR VA	5 22060-560	86	1
	FY84	FY85	FY86	FY87	FY88	FY89
6. 1	0	93	ø	Ø	ø	່ ຄ
6.2	è	360	566	500	ହେଉ	700
6.3A	0	হ	Ø	æ	S <sub>2</sub>	ର
6.3P	Ø	œ.	Ø	Ø.	@	Ø
6.4		0	@	0	Ø	ค
FYDP FUI	NDING [	6.1-6.4 J	(\$ in THOU	SANDS) FY87	FY88	FY89
	1 104	, , , , ,		1 10.		, , ,,,,,
IN-H	0	80	80	120	150	160
CONT	0	289	486	380	440	540
UNFUNDE	D E 6. 1-	-6.4 ] ( <b>4</b> i	n THOUSAND	S)		
	FY84	FY85	FY86	FY87	FY88	FY89
IN-H	e	9	ø	ø	Ø	ø
CONT	ē	ě	ē	0	ē.	võ
MAN YEAR WORK UNI' JOINT PRI DARPA Fui	T SUM: DJECT:	1	.01   1.01 	1 1.51 1	2.01 I 2.0	1

Page B-12

#### ROBOTIC INFORMATION SYSTEM

15-MAR-85 12:14:23

MODULE: INPCHK

SERVICE: ARMY

REFERENCE No: 1A-85-121
KEY No: 111 1431 | Ø1
PROJECT Title: 1COUNTERMINE ADVANCED DEVELOPMENT
PROJECT No: 11L636Ø6D6Ø832 |
CLASSIFICATION: 1UC1
TASK Title: 1COUNTERMINE ROBOTICS SYSTEMS
PERFORMING ORG: 1TROSCOM

PO ADDRESS: IBRDC FT BELVOIR VA 22060-5606

#### FYDP FUNDING [ RDT&E ] (\$ in THOUSANDS)

	FY84	FY85	FY85	FY87	FY88	FY89
6. 1	ø	Ø	Ø	Ø	ହ	<b>6</b> 1
6. 2	Ø	0	Ø	Ø	Ø	Ø
6. 3P	Ŵ	<b>V</b> i	Ø.	ଲ୍ଡଡ	1550	4500
6.38	Ø	Ø	Ø	Ø	2	0
6.4	Ø	Ø	Ø	Ø	Ø	Ø

#### FYDP FUNDING [ 6.1-6.4 ] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
IN-H	0	Ø	Ø	2.00	1550	4500
CONT	0	Ø	Ø	Ø.	Ø.	ହ

#### UNFUNDED [ 6.1-6.4 ] (\$ im THQUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
IM-H	Ø	Ø	Ø	Ø	Ø	Ø
CCNT	Ø	Ø ·	Ø	Ø	Ø	ହ

MAN YEAR(s): | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @

WORK UNIT SUM: 1 JOINT PROJECT: 1+++1

DARPA Funding: | 0| | 0.0|

15-MAR-85 12:14:44

MODULE: INPCHK

SERVICE: ARMY

PROJECT N CLASSIFIC TASK Titi PERFORMIN PO ADDRES	lo: ! CATION: ! e: ! IG ORG: ! S: !	A624010220 UC1 REMOTE CON TROSCOM BRDC FT BE	DETECTION, C@1	LD BRCHG V 22060-5606	EH	ING
	FY84	FY85	FY86	FY87	FY88	FY89
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6.2	. @	6	<b>@</b>	Ø	Ø	Ø
6.3A	0	0	0	Ø	0	Ø
6.3B	Ø	0	Ø	ø	ē	Ø
6.4	0	0	Ò	0	ø	Z;
FYDP FUN	IDING C 6	.1-6.4 ] (	s in THOUS	ANDS)		
	FY84	FY85	FY86	FY87	FY88	FY89
IN-H	2	ø	20	Ø	Ø	0
CONT	ē	ĕ	ē	ā	ø	ži.
•	C 6.1-6	.4 ] (\$ in	THOUSANDS	<b>)</b>	-	•
	FY84	FY85	FY86	FY87	FY88	FY89

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1 0.01 1 0.01 1 0.01 1 0.01 1 0.01 1 0.01

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1A-85- 131 1 11 | 1431 | 01

465

WORK UNIT SUM: | \*\*\*\*\*\*\*\* | | \*\*\*\*\*\*\*\*

REFERENCE No:

KEY No:

- IN-H

CONT

MAN YEAR(s):

JOINT PROJECT: 1+++1

DARPA Funding: | 0| | 0.0|

#### ROBOTIC INFORMATION SYSTEM

15-MAR-85 12:15:06

MODULE: INFCHK

SERVICE: ARMY

19-85- 141

REFERENCE No:

KEY No:	_ 1101	151 191	1 @1				<b>*</b>
	Titles	ICOUNTERMIN		& ENGINEER	ING DEVEL	OPMENT PROG	RAM - 1
PROJECT I		11L63606D60		4 2/102/122/1			; ·
CLASSIFI			·				
TASK Tit		IROBCTIC CO	NSTRUCTION	EQUIPMENT		1	
		ITROSCOM				1	
PO ADDRES	_	IBRDC FT BE	LVOIR VA	22060-5606		1	
FYDP FU	DING C	RDT&E ] (\$	in THOUSAN	05)			
	FY84	FY85	FY86	FY87	FY88	FY89	
6. 1	0	Ø	Ø	<b>Q</b>	Ø	٠ و	
6.2	Ø	Ø	Ø	Ø	0	Ø	
6. 3A	0	Ø	0	Ø	0	ହ	
6. 3B	Ø	Ŋ	0	Ø	Ø	Ø	
6.4	0	ହ	0	Ø	Ø	6	
FYDP FU	NDING C	6.1-6.4 ] (	\$ in THOUS	ANDS)			
	FY84	FY85	FY86	FY87	FY88	FY89	
IN-H	Ø	Ø	Ø	Ø	0	. 0	
CONT	0	Ø	Ø	Ø	0	&	
UNFUNDE	D C 6.1-	-6.4 ] (\$ in	THOUSANDS	)			
	FY84	FY85	FY86	FY87	FY88	FY89	
IN~H	Ø	Ø	ø	Ø	200	400	
CONT	0	Ø.	2	Ø	600	1100	
MAN YEAR WORK UNI JOINT PRO DARPA Fur	T SUM: OJECT:	0.0    0.  **********  +++			ଡା ଏ ଡ.ଡା		
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#### ROBOTIC INFORMATION SYSTEM

15-MAR-85 12:15:27

MODULE: INPCHK

SERVICE: ARMY

PROJECT CLASSIFI TASK Tit	Title: No: ICATION: :le: ING ORG:	IADV ACET M	76F I AINT HANDL	ING EQUIPM		. EGNIDWEN	т)	• *
FYDP FL	) BNIGNL	RDT&E 3 (\$ :	in THOUSAN	DS)				
	FY84	FY85	FY86	FY87	FY88	FY89		
6.1	Ø	Ø	Ø	Ø	Ø	. 0		
6.2	Ø	Ø	Ø	230	310	520		
6. 3A	Ø	Ø	Ø	Ø	Ø	Ø		
6.3B	Ø	Ø	Ø	Ø	Ø.	Ø		
6.4	Ø	ହ	Ø	0	Ø	<b>Ø</b> 1		
FYDP FL	JNDING [	6.1-6.4 ) (	in THOUS	ANDS)				
	FY84	FY65	FYS6	FY87	FY88	FY89		
IN-H	Ø	e e	Ø	50	60	70		
CONT	Ø	0	Ø	1.80	250	450		
UNFUNDE	D [ 6.1-	6.43 (* in	THOUSANDS	)				
	FY84	FY65	ة ع	FY87	FY88	FY89		
IN-H	0	ø	Ø	ହ	Ø	<b>@</b>	7	
CONT	0	Ø	Ø	Ø	ক	<b>©</b>		
MAN YERR WORK UNI JOINT PR DARPA FU	T SUM: ROJECT:	0.0    0.0  **********  +++    0    0		: 0.5(   0 *****	.51   0.51			

#### ROBOTIC INFORMATION SYSTEM

15-MAR-85 12:15:49

MODULE: INPCHK

SERVICE: ARMY

REFERENCE No: KEY No:	IA-85- 16! ! 1!   18!   143!
PROJECT Title:	ISTRATEGIC COMPUTING PROGRAM
PROJECT No:	14E20 1
CLASSIFICATION:	1 1
TASK Title:	IAUTONOMOUS LAND VEHICLE/IMAGE UNDERSTDG !
PERFORMING ORG:	IAETL
PO ADDRESS:	IFT BELVOIR VA 22060-5546

#### FYDP FUNDING [ ROT&E ] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
6. 1	Ø.	ø	ø	Ø	Ø	. 6
6.2	3950	9950	1200	0	Ø	6
6.39	Ø	0	Ø	Ø	Ø	श
6.3B	. Ø	0	Ø.	Ø	Ø	Q
6.4	Ø	0	Ø	Ø	0	ଡ

#### FYDP FUNDING ( 6.1-6.4 ) (\$ in THOUSANDS)

	FY84	FY95	FY86	FY87	FY88	FY89
IN-H	250	350	<b>4</b> ወ ወ	Ø	ø	æ
CONT	3700	96ଉଡ	8ଉଡ	থ	Ø	Ġ.

#### UNFUNDED [ 6.1-6.4 ] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
IN-H	Ø	Ø	হ	<b>છ</b>	<b>ራ</b>	Ø
CONT	Ø	Ø	হ	છ	ወ	Ø

MAN YEAR(%): | 2.0| | 5.0| | 6.0| | 0.0| | 0.0| | 0.0| | WORK UNIT SUM: | \*\*\*\*\*\*\*\*\* | | \*\*\*\*\*\*\*\*\*

JOINT PROJECT: i+++1

DARPA Funding: | 11 | 100.01

#### ROBOTIC INFORMATION SYSTEM

15-MAR-85 12:16:11

MODULE: INFCHK

SERVICE: ARMY

REFERENCE No: !A-85-17!

KEY No: !1! !18! !43!

PROJECT Title: |SMART TERRAIN ANALYSIS FOR ROBOTIC SYSTEMS (STARS)

PROJECT No: ! !

CLASSIFICATION: |UC!

TASK Title: |AUTOMATIC ROUTE PLANNING TECHNOLOGIES !

PERFORMING ORG: |AETL |

PO ADDRESS: | FT BELVOIR VA 22060-5606

#### FYDP FUNDING [ RDT&E ] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
6.1	0	Ø	Ø	ø	Ø	. 6
6.2	453	600	500	275	. Ø	Ø
6.3A	0	0	0	Ø	0	Ø
6.3B	0	Ø	Ø	Ø	. Ø	0
6.4	Ø	Ø	0	0	0	6)

#### FYDP FUNDING C 6.1-6.4 3 (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
IN-H	150	450	350	200	ହ	0
CONT	303	150	150	75	ହ	0

#### UNFUNDED [ 6.1-6.4 ] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
IN-H	Ø	ø	Ø	Ø	Ø	0
CONT	29	2	Ø	Ø	Q	Ø

MAN YEAR(s): 11,91 | 5.51 | 5.11 | 1.91 | 0.01 | 0.01

WORK UNIT SUM: 10A300656 | 110/01/84 |

JOINT PROJECT: 1+++1

1969 Jan 1

DARPA Funding: | 01 | 0.01

15-MAR-85 12:16:32

MODULE: INPCHK

FY89

SERVICE: ARMY

REFERENCE No: IA-85- 181 1 11 1181 1431 KEY No: PROJECT Title: ITANK-AUTOMOTIVE TECHNOLOGY 11L162601AH91 PROJECT No: CLASSIFICATION: IUCI TASK Title: PERFORMING ORG: ISENSING & AI FOR COMBAT VEHICLE ROBOTICS! ITACOM PO ADDRESS: IWARREN MI 48090 FYDP FUNDING [ RDT&E ] (\$ in THOUSANDS) FY87 FY84 FY85 FY86 FY88

						•
6. 1	0	0	Ø	20	Q	Ø
6. 2	30	700	700	Ø	Ø	Ø
6. 3A	0	Ø	Ø	Ø	Ø	e
6. 3B	Ø	Ø.	0	Ø	Ø.	0
<b>6.4</b>	<b>Ø</b>	Ø	Ø	Qt	<b>(7)</b>	0
FYDP FU	NDING [ 6 FY84	.1-6.4 ] ( FY85	\$ in THOUS!	ANDS) FY87	FY98	FY89
IN-H	. 8	200	200	Ø	Ø	Ø
CONT	30	500	540	8	Ø	Ø
UNFUNDE	D C 6.1-6	.4 3 (* in	THOUSANDS			
	FY84	FY85	FYBE	FY97	FY88	FY89
IN-H	0	Ø	Ø	ø	Ø	9
CONT	Ø	Ø	Ø	Ø	Ø	(P)
MAN YEAR	(5); i	0.01 1 2.	ହା । ଥ.ବା	ା ହେ.ଡା ା ହ	.01   0.01	

MAN YEAR(s): | 0.01 | 2.01 | 2.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01

JOINT PROJECT: 1+++1

DARPA Funding: | 0| | 0.0|

<sup></sup>

#### ROBOTIC INFORMATION SYSTEM

15-MAR-85 12:16:54

MODULE: INPCHK

SERVICE: ARMY

REFERENCI KEY No: PROJECT I PROJECT I CLASSIFION TASK Tit PERFORMIN PO ADDRES	Title: No: CATION: le: NG ORG:	RESHAPE	DR EVALUAT	ING NBC R	ESISTANT MA	TERIALS
FYDP FU	DING C	RDT&E ] (# :	in THOUSAN	DS)		
	FY84	FY85	FY86	FY87	FY88	FY89
6. 1	0	55	જ	æ	0	<b>ø</b> .
6.2	9	0	0	Ø	6	. 0
6.3A	6	Ø	₽	ଡ	20	ହ
6.38	0	Ø.	Ø	0	<b>Ø</b>	0
6.4	Ø	Ø.	<b>ም</b>	0	Ø	Ø
FYDP FU	NDING (	6.1-6.4 ] (	in THOUS	ANDS)		
	FY84	FY85	FY86	FY87	FY88	FY89
IN-H	0	ø	ø	Ø	Ø	0
CONT	9	55	S.	Ø	Ø	ହ
UNFUNDE	C 6.1-	-6.4 J (* in	THCUSANDS	•	•	
	FY84	FY85	FY86	FY87	FY88	FY89
IN-H	Ø	Ø	20	0	Ø	8
CONT	Ø	Ø	0	Ø	Ø	ହ
MAN YEAR WORK UNI' JOINT PRO	T &C .	i  +++ ,	01   0.01   104 NO		ଫ.ଫା । ଫ.ଫା	

15-MAR-85 12:17:15

MODULE: INPCHK

SERVICE: ARMY

REFERENCE No: 19-85- 201 1 11 | 1181 | 1431 KEY No: PROJECT Title: IMULTIMISSION ROBOTICS PROJECT No: 1864301 . . CLASSIFICATION: IUCI ILIGHT MOBILE ROPOTIC SYSTEM (LMRS) TASK Title: PERFORMING ORG: IADEA PO ADDRESS: IFT LEWIS, WA 98433-5000

FYDP FUNDING [ RDT&E ] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
6. 1	0	Ø	Ø	0	Q	. 0
6.2	Ø	Ø	0	8	8	•
6. 3A	295	125	200	225	225	225
6. 3B	20	Ø	Ø	0	Ø	9
6.4	Ø	0	0	Ø	0	Ø

FYDP FUNDING [ 6.1-6.4 ] (\$ in THOUSANDS)

	FY84	FY85	=Y86	FY87	,FY88	FY89
IN-H	0	0	0	0	ę	9
CONT	<b>20</b> 5	125	200	225	225	225

UNFUNDED [ 6,1-6.4 ] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
IN-H	Ø	ଡ	Ø	<b>ଏ</b>	छ	ହ
CONT		ବ	9	ଫ	छ	୧୯

MAN YEAR(s): 1 1.51 | 1.51 | 1.51 | 1.51 | 1.51 | 1.51 

WORK UNIT SUM:

IAN I JOINT PROJECT:

1 501 1 2.51 DARPA Funding:

15-MPR-85 12:19:15

MODULE: INPCHK

SERVICE: PRMY

PROJECT CLASSIFIC TASK Tit PERFORMIC PO ADDRES	Title:	NY ADVANCEI DK78 UCI AUTONOMOUS	VISION SY ELUDIR VA	STEM (3)		f 1
	FY84	FY85	FY86	FY87	FY88	FY89
6.1	0	ø	Ø	Q	Ø.	20
6.8	è	ě	ě	Ď	à	õ
6. 3A	ē	ě	ō	1000	2500	2000
6. 3B	ē	ě	é	0	0	0
6.4	•	ě	iñ	Ø	Ø	8
FYDD FU	NDING ( 6	.1~6.4 J (1	in THOUS	ANDS)		
	FY84	FY85	FY86	FY87	FY8A	FY89
IN-H	8	8	ø	1000	2500	ଥଉଉଉ
CONT	0		ø	Ø.	Ø	8)
UNFUNDE	D [ 6.1-6	.43 (\$ in	THOLISANDS	<b>&gt;</b>		
	FY84	FY85	FY86	FY87	FY88	FY89
IN-H	8	•	0	•	Ø	Q
CONT	0	<b>€</b>	æ	€	20	87
MAN YEAR HORK UNI' DARPA FUI	T SUM: 1	0.01 1 0.6 ************ +++1 01 1 3		: 0.01   0 *****	.ଡା । ଡ.ଡା	

15-M9R-85 12:18:39

MODULE: INPCHK

SERVICE: ORMY

REFERENCE No: | 14-85- 22|
KEY No: | 11 | 118| | 143|
PROJECT Title: | IADVANCED CONCEPTS
PROJECT No: | 11162709DH95DO | |
CLASSIFICATION: | IUC|
TASK Title: | IINTELLIGENT TACTICAL AUTONOMOUS CONTROL | |
PERFORMING ORG: | IERADCOM | |
PO ADDRESS: | INVEOL FT BELVOIR VA 22060-5677

FYDP FUNDING [ RDTRE ] (\$ in THOUSANDS)

	FY84	FY85	FY86	FYR7	FY88	FY89
6. 1	ଡ	ø.	ø	ø	Ø	· 🔊
6. a	270	60	110	Ø	Ø	0
6. 3A	0	<b>©</b>	Ø	Ø.	Ø	Ø
6. 3B	Q.	Ø	Ø	Ø	Ø	Ø
6.4	0	Ø	Ø	Ø	<b>Ø</b> )	2h

FYDP FUNDING ( 6.1-6.4 ) (\* in THOUSANDS)

	FY84	FY85	FYAS	FY87	FY88	EA8ä
IN-H	12	10	10	<b>ም</b>	Ø	ଷ
CONT	2 <b>5</b> 8	50	100	ወ	Ø	୧୯

UNFUNDED ( 6.1-6.4 ) (\* in THOUSANDS)

	FY84	FY85	FYSS	FY87	FY88	FY89
IN-H	0	Ø	10	50	50	10
CONT	9	<b>Ø</b> (	<b>ଅ</b> ହାଡ	950	1150	490

MAN YEAR(s): 1 0.21 1 0.21 1 0.21 1 0.01 1 0.01 1 0.01

WORK UNIT SUM: 1DA304353 1 1MARCH 19841

JOINT PROJECT: 1+++1

DARPA Funding: | 01 | 2.51

REFERENCE No:

WORK UNIT SUM:

JOINT PROJECT:

DARPA Funding:

1+++1

1 8251 1 8.01

KEY No:

#### ROPOTIC INFORMATION SYSTEM

15-MAR-85 12:19:01

MODULE: INPCHK

SERVICE: ARMY

IA-85- 231 | 11 | 1181 | 1431

PROJECT CLASSIFI TASK Tit PERFORMI PO ADD	Title:   No:   ICATION:   ICATION:   Ide:   IMG DTG:   IMG DTG:	SMART SENS 1L161102A3 UCI AUTONOMOUS	1800   VEHICLE N	AVIGATION 22060-567	7	!
	FY84	FY85	FY86	FY87	FYBB	FY89
6. 1	415	410	` <b>Q</b>	જ	8	8
6.2	2	ē	à	è	ě	Ø
6. 3A	è	ē	v.	ě	Ž.	ē
6, 3P	ē	Ø.	0	ė	ø	Ø
6. 4	ø	œ.	Ø	Ø	Ø	Ø
FYDO FL	BNIGH	.1-6.4 ] (	s in THOUS	ANDS)		
	FY84	FY85	FY86	FY87	FY88	FY <b>89</b>
IN-H	10	10	Ø	8	Ø	e
CONT	405	400	Ø	0	Ø	6
UNFUNDE	ED [ 6.1-6	.4 ] (\$ in	THOUSANDS	)		
	FY84	FY85	FY86	FY87	FYBB	FY89
IN-H	ø	ø	10	20	20	20
CONT	Ø	Ø	536	580	580	580
MAN YEAR	t(s):	0.21 1 0.	21 10.01	1 @. 01 1 0	. 01 1 0.01	

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#### ROBOTIC INFORMATION SYSTEM

15-MAR-85 12:19:23

MODULE: INPCKK

#### SERVICE: ARMY

PROJECT CLASSIFI TASK Tit PERFORMI PO ADDRE	Title: No: CATION: le: NG ORG: SS:	IAUTO INTER	. MEAS. (P ) DVEN TRANS H NJ &770	. OF GLASS	PREFORMS	t 1
, , , , , , ,	FY84	FY85	FY86	FY87	FY88	FY89
6. 1	ø		Ø	Ø.	Ø	ęı
6.2	ě	ě	ě	ò	õ	0
6.3A	0	ě	ě	0	ē.	ē
6.38	ě	ě	è	à	ō.	Ø.
6. 4	ě	200	à	400	ā	ด
FYDP FU	NDING (	6.1-6.4 ] ( FY85	\$ in THOUS	ANDS) FY87	FY88	FY89
IN-H	8	<b>@</b>	Ø.	Ø	0	Ø
CONT		200	Ø	400	0	ଡ
UNFUNDE	D [ 6.1-	-6.4 ] (\$ in	THOUSANDS	) FY87	FY88	FY89
	_	_		•	•	
IN-H	0	Ø	Ø 37:	Ø Ø	@ 27	ହ ଶ
CONT	0	Ø.	V.	VO.	V.	€रा
MAN YEAR WORK UNI JOINT PR DARPA FU	T SUM: DJECT:	1 0.01 1 0. 1************************************		0.0    0 *****	.ଡା । ଉ.ଡା	

15-MAR-85 12:19:44

MODULE: INPCHK

SERVICE: ARMY

PO ADDRE	Title: No: CATION: le: NG ORG: SS:	IVITAL SIGN' I I I	? PREDERICK	MD 21781		1
	FY84	FY85	FY86	FY87	FY88	FY89
6. 1	495	2	Ø,	a	Ø	. 8
6.2	0	é	0	ø	e	9
5. 3A	0	500	500	500	500	500
6. 3B	Ø	8	•	Ø	0	9
6.4	0	9	0	<b>®</b>	Ø	69
FYDP FU	NDING (	5.1-6.4 ] (	in THOUS	ANDS)		
	FY84	FY85	FY86	FY87	FYBB	FY89
IN-H	6	ø	ø	Ø	e	0
CONT	495	500	500	<b>ଅବ</b> ହ	500	500
UNFUNDE	D [ 5.1-6	5.4 J (\$ in	THOUSANDS	).		
·	FY84	FY85	FY86	FY87	FY88	FY89
IN-H	8	0	ø	Ø	0	ø
CONT	Ø	Ø	Ø,	Ø	Ø	Ö
MAN YEAR WORK UNI JOINT OR DARPA FU	T SUM: DJECT:	0.01   0.1  *********  +++   01   0		ነ ው. ው! ነ ወ *****	.ହା ଏହ.ଡା	

15-MAR-85 18:20:06

MODULE: INPCHK

SERVICE: ARMY

REFFRENCE No: 19-85- 261

KEY No: | 11 | 181 | 1431

PROJECT Title: IROBOTICS (WEAPONS SYSTEM)

PROJECT No:

CLASSIFICATION: IUCI

TASK Title: | ROBOTIC ANTI ARMOR SYSTEM

PERFORMING ORG: IMICOM

PO ADDRESS: I REDSTONE ARSENAL AL 35898-5247

#### FYDP FUNDING [ RDT&E ] (5 in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
6.1	0	ଅଷ୍ୟ	350	300	Ø	0
6.2	Ø	Ø	Ø	Ø	Ø	· Ø
6.3A	Ø	Ø	Ø	Ø	Ø	<u>17</u> 1
6.38	Ø	Ø	Ø	Ø	Ø	0
6.4	. 0	120	Ø	Ø	Ø	<b>6</b> 1

#### FYDD FUNDING [ 6, 1-6.4 ] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
IN-H	Ø	100	200	<b>ප</b> තන	ଡ	Ø
CONT	0	100	150	100	Ø	Ø

#### UNFUNDED [ 6.1-6.4 ] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
IN-H	0	ø	Ø	Ø	Ø	Ø
CONT	Ø	0	Ø	2	Ø	Ø

MAN YEAR(s): | 0.01 | 1.01 | 2.01 | 2.01 | 0.01 | 0.01

WORK UNIT SUM: 1

JOINT PROJECT: 1+++1

DARPA Funding: | @| | 8.0|

\*\*\*\*\*\*\*\*\*\*\*\*\*

15-MAR-85 12:20:27

MODULE: INPCHK

SERVICE: ARMY

REFERENCE No: KEY No: PROJECT Title: PROJECT No: CLASSIFICATION TASK Title: PERFORMING ORG PO ADDRESS:	ISCIENTI ILLI6110 ILLI6110 ICLASS.	91   01 FIC PROBLE 28H5706   OF SINGLE	& MULTI D-C	ITARY APPL D-F MOTIONS ADISON WISC	ICATIONS 1 1 53706
FYDP FUNDING	C RDT&E 3	(\$ in THOUS	SANDS)		
FY84	FY85	FY86	FY87	FY88	FY89
6.1 36	39	42	Q1	Ø	· @
6.2	9 0	0	Ø	0	0
6.3A (	9	Ø	ହ	₽.	ହ
6.3B		-	0	21	Ø
6.4	9	0	Ø	6	<b>જ</b>
FYDP FUNDING	C 6.1-6.4	] (\$ in TH(	OUSANDS)		
FY84	FY85	FY86	FY87	FY88	FYSS
IN-H 0	9	0	Ø	Ø	0
CONT 36	39	42	20	Ø	Ö
UNFUNDED ( 6.	1-6.4 ] (\$	in THOUSAM	NDS)		
FY84	FY85	FY86	FY87	FYRR	FY89
IN-H 9	9 0	ø	ø	Ø	Ø
CONT			ē	ā	ø
MAN YEAR(s): WORK UNIT SUM: JOINT PROJECT: DARPA Funding:	1+++1	0.01   0.0   14 I		ଫ.ଫା t ଅ. (	ā 1

### ROBOTIC INFORMATION SYSTEM

15-MAR-85 12:20:49

MODULE: INPCHK

SERVICE: ARMY

REFERENCE KEY No: PROJECT N PROJECT N CLASSIFIC TASK Titl PERFORMIN PO ADDRES	(itle: !! lo: !! CATION: !! le: !!	IL161102BH JCI CREAT. MEC ARO	1 01 PPOBLEMS 5706 1 HANISMS: S NIV NEW YO	EPAR. KINE	MATICS	ATIONS !
FYDP FU	VDING [ R	DT&E ] (\$	in THOUSAN	08)		
	FY84	FY85	FY86	FY87	FY88	FY89
6.1	ବେ	Q	Ø	Ø	z <sub>e</sub>	به ·
6. ≥	Ø	Ø	Ø	Ø	Ø	<b>1</b> 21
6.3A	Ø	Ø	Ø	Ø	Ø	<b>(</b> 2)
6.3P	Ø	Ø	0	Ø	Ø	Ø
6.4	0	Ø	Ø	127	127	Ø)
FYDP FUN	NDING [ 6	.1-6.4 J (	\$ in THOUS	(SDNA		
	FY84	FY85	FY86	FY@7	FY88	FV89
IN-H	2	ø	Ø	Ø	হ	Ø
CONT	60	Ø.	ō.	<b>'</b> 2'	Ø	ହ
UNFUNDEI	) [ 6,1-6	, <b>4] (\$</b> in	THOUSANDS	<b>)</b>		
	FY84	FY85	FY86	FY87	FY88	FY89
IN-H	Ø	Ø	Ø	Ø	Ø	Ø
CONT	0	Ø	হৌ	ୟ	Ø	ପ
MAN YEAR OWNER OF THE TOTAL TO	SUM: 10	+++1	ହା । ହ.ହା ା ।୧५ ୦୦	1 0.01 1 0 T 84 1	.ଡା   ଡ.ଡା	

#### ROBOTIC INFORMATION SYSTEM

15-MAR-85 12:21:11

MODULE: INFCHK

SERVICE: ARMY

REFERENCE No: KEY No: PROJECT Title PROJECT No: CLASSIFICATIO TASK Title: PERFORMING OR PO ADDRESS: FYDP FUNDING	11L161102 N: IUC1 IDESIGN M G: IPRO ISTATE UN	I I Ø) IC PROBLEM BH57Ø6 I ECHANISMS: IV OF NY F	SANDS)	TION CHAR.		
FY8	4 FY85	FY86	FY87	FY88	FY89	
6.1 4	5 52	58	Q	Ø	Ø	
	0 0	2	ø	è	ø	
	a	ō	Ó	ž	ei ei	
	9	Ø	ø	Q.	Ö	
6.4	o 0	Ø	Ø	8	ହ	
FYDP FUNDING	t 6.1-6.4 J	(# in THO	)USANDS)			
FYB	4 FY85	FY86	FY87	FY88	kA8ä	
IN-H	2 0	Ø	Ø	Ø	0	
CONT 46		58	Ø	ø	ตั	
UNFUNDED C 6.	1-6.4 ] (\$	in THOUSAN	IDS)			
FY8	4 FY85	FYB6	FY87	FYAB	FY89	
IN-H	a a	ପ	Ø	Ø	Ø	
	a o	2	ø	ັ້	ର	
MAN YEAR(s): WORK UNIT SUM: JOINT PROJECT: DARPA Funding:	IN/A	1 104	11   0.01   DEC 84	ଫ.ଫା । ଫ.	ছে।	

### ROBOTIC INFORMATION SYSTEM

15-MAR-85 12:21:32

MODULE: INPCHK

SERVICE: ARMY

PROJECT CLASSIF! TASK Tit PERFORM! PO ADDRE	Title:   No:   ICATION:   ICATION	INTEGRATED 1L162603AH UC1 ROBOTIC AU	18   TOLOADER NJ 07801	-5001	THESIS	1
	FY84	FY85	FY86	FY87	FY88	FY89
6. 1	Ø	a		Ø	Ø	Øt
6.2	1708	2155	3400	3800	3800	3500
6.3A	0	0	è	@	0	8
6. 3B	Ø	ě	ø	õ	é	õ
6.4	0	ě.	e e	ø	ē	ดิ
FYDP FL	NDING C 6	6.1-6.4 3 (	\$ in THOUS	ANDS)		
	FY84	FY85	FY86	FY87	FYBB	FY89
IN-H	1083	1305	1900	2300	2300	2500
CONT	625	850	1500	1500	1500	1000
UNFUNDE	D ( 6.1-6	i.4 ] (* in	THOUSANDS	<b>)</b>		
	FY84	FY85	FY86	FY87	FY88	FY89
IN-H	Ø	Ø	Ø	Ø	Ø	Ø
CONT	Ø	Ž.	Ž.	Ø	Ž.	Ø
MAN YEAR WORK UNI JOINT PR DARPA FU	T SUM: : : ROJECT: : :	11.6    17.6 ********* +++)		-	.11 140.31	

Page B-31

#### ROBOTIC INFORMATION SYSTEM

15-MAR-85 12:22:29

MODULE: INPCHK

SERVICE: ARMY

19-85- 311 171 | 91 | 01

REFERENCE No:

KEY No:

PROJECT CLASSIFI TASK Tit	Title:   No:   CATION:   le:   NG ORG:	•	NGUAGE INT I			. <del>1</del> 1
FYDP FL	INDING [ R	*) [ 3%TQ	in THOUSAN	DS)		
	FY84	FY85	FY86	FY87	FY88	FY89
6. 1	Ø	75	1 ወወ	. 100	0	Ø
6. 2	Ø	থ	₹Ž	<b>1</b> 2	@	Ø
6.3A	. Ø	Ø	Ø	ହ	Ø	<b>©</b> 1
6. 3B	Ø.	Ø	20	ହ	ଉ	0
6.4	Ø.	হ	Ø	Ø	Ø.	Ø
FYDP FL		.1-6.4 J (			==	
	FY84	FY8 <b>5</b>	FYB6	FY87	FY98	FY89
IN-H	æ	75	<del>6</del> Ø	ନେହ	ιδι	Ø
CONT	Ø	<b>Q</b>	42)	40	Ø	ହ
UNFUNDE	D [ 5.1-6	.4 ] ( <b>\$</b> in	THOUSANDS	>		
	FY84	FY85	FY86	FY87	FY88	FY89
IN-H	Ø	Ø	0	Ø	Ø	Ø
CONT	Ø	ହ	Ø.	Ø	ষ্ট	<b>6</b> 1
MAN YEAR WORK UNI JOINT PR DARPA FU	T SUM: I	0.0;   0.; ********* +++  0!   1			.ଫା ା <b>ଡ.</b> ଫା	

#### ROBOTIC INFORMATION SYSTEM

15-MAR-85

MODULE: INPCHK

SERVICE: ARMY

REFERENCE No: 1A-85- 321

KEY No: 151 191 101

PROJECT Title: IADVANCED ARMAMENT CONCEPTS

PROJECT No: 1AH18A1

CLASSIFICATION: |UC|

TASK Title: | LIGHTWEIGHT AUTOLOADERS

PERFORMING ORG: : AMCCOM

PO PODRESS: 1ARDC DOVER NJ 07801-5001

#### FYDP FUNDING ( RDT&E ) (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
6.1	Ø	Q	0	ø	0	. 6
6.2	3 <b>05</b>	250	245	230	245	245
6.3A	<b>@</b>	Ø	Ø	Œ	Ø	<b>Ø</b> 1
6.3B	0	Ø	Ø	Ø	0	0
6.4	Ø	Ø	0	0	Ø	ଉ

#### FYDP FUNDING ( 6.1-6.4 ) (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
IN-H	25 <b>5</b>	ଅଟନ	ଅଡଡ	190	200	210
CONT	50	ଅଟ	45	40	45	35

#### UNFUNDED [ 6.1-6.4 ] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
IN-H	· 20	Ø	Ø	ø	120	0
CONT	ହ	Ø ·	Ø	Ø	₽.	Ø:

MAN YEAR(s): | 2.01 | 2.01 | 2.01 | 2.01 | 2.01 | 2.01

WORK UNIT SUM: | \*\*\*\*\*\*\* | | \*\*\*\*\*\*\*\*

JOINT PROJECT: !+++!

DARPA Funding: | @| | @.@|

<sup>\*</sup>

15-MAR-85 12:23:14

MODULE: INPCHK

SERVICE: ARMY

REFERENCE No: IA-85- 33!
KEY No: I 61 I 9! I 0!
PROJECT Title: PRESEARCH IN FIRE CONTROL AND SMALL CALIBER ARMAMENTS
PROJECT No: IAH61 !
CLASSIFICATION: IUC!
TASK Title: PERFORMING ORG: IAMCCOM !
PO ADDRESS: IARDC DOVER NY 07801-5001 !

FYDP FUNDING [ RDT&E ] (\* in THOUSANDS)

122

	FY84	FY85	FY86	FY87	FY88	FY89
6.1	274	365	350	400	Ø	0
6.2	Ø	0	Ø	0	500	500
6.3A	Ø	Ø	Ø	Ø	Ŋ.	Ø
6.3B	. 🔞	Ø	Ø	Ŋ.	2	Ø
6.4	Ø	Ø	Ø	Ø	<b>V</b> i	ଚ

FYDD FUNDING [ 6.1-6.4 ] (\$ in THOUSANDS)

	FY64	FY85	FY86	FY87	F <b>Y8</b> 8	FY89
IN-H	177	197	18୧	180	18 <b>ଡ</b>	180
CONT	<b>97</b>	168	17୧	220	ସମ୍ଭ	320

UNFUNDED [ 6.1-6.4 ] (\$ in THOUSANDS)

	FY84	FY83	FYSS	FY87	FY88	FY89
IN-H	e e	Ø	120	250	200	180
CONT	Ø	0	1400	1800	1820	2320

MAN YEAR(s): | | 2.5| | 3.0| | 3.0| | 3.0| | 3.0|

WORK UNIT SUM: | DAOG9551 | | JUN 1984 |

JOINT PROJECT: 1+++1

DARPA Funding: | 0 | | 0.01

#### ROBOTIC INFORMATION SYSTEM

15-MAR-85 12:23:36

MODULE: INPCHK

SERVICE: ARMY

REFERENCE No: IA-85- 341
KEY No: I 51 : 91 : 01
PROJECT Title: IADVANCED ARMAMENT CONCEPTS
PROJECT No: IAH18A1 :
CLASSIFICATION: IUC!
TASK Title: IHI-TECH AUTOLOADERS
PERFORMING ORG: IAMCCOM
PO ADDRESS: IARDC DOVER NJ 07801-5001

FYDP FUNDING [ RDT&E ] (\$ in THOUSANDS)

	FY94	FY85	EA86	FY87	FY86	FY89
6.1	0	Ø	Ø	Ø	Ø	A
5.2	650	300	275	290	Ø	Ø
6.3A	Ø	0	2	Ø	0	Ø
G. 3B	Ø	Ø	Ø	Ø	Ø	ହ
6.4	Ø	Ø	@	Ø	Ø	ମ

FYDP FUNDING ( 6.1-6.4 ) (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
IN-H	200	200 700	275	290 0	Ø O	Ø
CONT	45Ø	700	21	V.	Ø	ର

UNFUNDED [ 6.1-6.4 ] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
IN-H	Ø	500	1 ଡ ଡ ଡ	1200	ହ	Ø
CONT	Ø	300	1 ଡ ଡ ଡ	1200	ଉ	Ø

MAN YEAR(s): | 2.01 | 2.01 | 2.01 | 2.01 | 0.01 | 0.01

WORK UNIT SUM: | \*\*\*\*\*\*\*\* | | \*\*\*\*\*\*\*\*\*

JOINT PROJECT: 1+++1

DARPA Funding: | 0| | 0.0|

15-MAR-85 12:23:57

MODULE: INPCHK

SERVICE: ARMY

TASK Tid PERFORM! PO ADDRS	Title:   No:   ICATION:   ICATION:   IOS ORG:   ISS:	AH61 UC! ROBOTIC CO AMCCOM ARDC DOVER	NTROL NJ ©7801-	-3001	BMALL CALIE	ER ARMAMENT	g <b>•</b> ‡ 1
FYDP FL		RDT&E ] (=				<b>5</b> ,45 <b>5</b>	
	FY84	FY85	FY86	FY87	FY88	FY89	
6. 1	Ø	293	270	300	240	300	
5. 2	2	0	2	2	Ø	Ø	•
6. 3A	Ø	é	<b>2</b>	Ø	Ø	<u>.</u>	
6. 3P	0	0	Ø	Ø	Ø	0	
6. 4	8	œ.	Q	Ċ	Ø	Ø.	
FYDP FL	JNDING C 6	6.1-6.4 J (	s in THOUS	SANDS)			
	FY84	FY85	FYB6	FY87	FY88	FY89	
IN-H	0	188	170	170	140	170	
CONT	0	105	100	130	100	130	
UNFUNDE	ED C 6.1-6	i.4 3 (\$ in	THOUSANDS	3)	•		
	FY84	FY85	FY86	FY87	FY88	FYAS	
IN-H	Ø	Ø.	50	50	୧୬	50	
CONT	0	Ø	1 ହହ	150	ଅଟନ	150	
MAN YEAR WORK UNI JOINT PR DARPA FA	IT SUM: 1 ROJECT: 1	0.01   3. ******** +++1 01		2.5    8  *****	2.01   2.61		

#### ROBOTIC INFORMATION SYSTEM

15-MAR-85 12:24:19

MODULE: INPCHK

SERVICE: ARMY

REFERENCE NO! 10-85- 361

KEY No: 161 1481 101

PROJECT Title: IPARTIAL SHAPE RECOGNITION

PROJECT No:

CLASSIFICATION: | UC|

TASK Title:

PERFORMING ORG: LAMCCOM PO ADDRESS: | LARDO DOVER NJ 07801-5001

FYDP FUNDING ( RDT&E ) (\$ in THOUSANDS)

	FY84	FY85	FY86	SY87	FY88	FY89
6. 1	194	210	250	ø	Ø	. 8
6.2	Ø	Ø	Ø	2	Ø	Ø
6.3A	Ø .	Ø	Ø	20	Ø	Ŕ
6.3B	Ø	Ø	Ø	Ø	Ø	Ø
6.4	Ø	Ø	Ø	Ø	0	<b>6</b> 0

FYDP FUNDING [ 6.1-6.4 ] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
IN-H	80	80	258	ø	ফ	ହ
CONT	114	130	0	Ø	হ	<b>2</b> 3

UNFUNDED [ 6.1-6.4 ] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
IN-H	Ø	Ø	ଡ	Ø	ত	a
このバエ	ଅ	Ø	<b>(2)</b>	Ø,	<b>7</b> 0	Ø

ା ଡ.ଡା । ଡ.ଡା । ଡ.ଡା । ଡ.ଡା । ଡ.ଡା । ଡ.ଡା MAN YEAR (%):

WORK UNIT SUM: IDAOG2807 | | JOINT PROJECT: |+++1

DARPA Funding: ! 01 | 0.0!

ROBOTIC INFORMATION SYSTEM

15-MAR-85 12:24:41

MODULE: INPCHK

SERVICE: ARMY

REFERENCE No:	
KEY No:	181 1431 191
PROJECT Title:	IADVANCED ARMAMENT CONCEPTS
PROJECT No:	(AH18A1
CLASSIFICATION:	IUCI
TASK Title:	IULTRA-LIGHTWEIGHT ARMAMENT SYSTEM
PERFORMING ORG:	IAMCCOM
PO ADDRESS:	IARDC DOVER NJ 07801-5001
FYDP FUNDING [	RDT&E 1 (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FYBB	FY89
6.1	. 6	Ø	Ø	Ø	ø	0
ნ. ≥	350	360	375	380	395	400
6.3A	Ø	0	0	Ø	Ø	Ø
6.3B	ø	0	Ø	Ø	Ø	0
6.4	Ø	0	0	Ø	ফ	Ø

FYDP FUNDING C 6.1-6.4 J (\$ in THOUSANDS)

	FY84	FY85	FYB6	FY87	FY88	FY89
IN-H	300	310	320	325	335	340
CONT	50	50	55	55	60	ହେ

UNFUNDED [ 6.1-6.4 ] (\* in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
IN-H	Ø	ହ	ହ	ହ	Ø	Ø
	Ø	ହ	ସ	<b>ପ</b>	Ø	Ø

MAN YEAR(s): | 4.01 | 4.01 | 4.01 | 4.01 | 4.01 | 4.01 | 4.01 | 4.01 | 4.01 | 4.01 | 4.01 | 4.01 | 4.01 | 4.01 | 4.01 | 4.01 | 4.01 | 4.01 | 4.01 | 4.01 | 4.01 | 4.01 | 4.01 | 4.01 | 4.01 | 4.01 | 4.01 | 4.01 | 4.01 | 4.01 | 4.01 | 4.01 | 4.01 | 4.01 | 4.01 | 4.01 | 4.01 | 4.01 | 4.01 | 4.01 | 4.01 | 4.01 | 4.01 | 4.01 | 4.01 | 4.01 | 4.01 | 4.01 | 4.01 | 4.01 | 4.01 | 4.01 | 4.01 | 4.01 | 4.01 | 4.01 | 4.01 | 4.01 | 4.01 | 4.01 | 4.01 | 4.01 | 4.01 | 4.01 | 4.01 | 4.01 | 4.01 | 4.01 | 4.01 | 4.01 | 4.01 | 4.01 | 4.01 | 4.01 | 4.01 | 4.01 | 4.01 | 4.01 | 4.01 | 4.01 | 4.01 | 4.01 | 4.01 | 4.01 | 4.01 | 4.01 | 4.01 | 4.01 | 4.01 | 4.01 | 4.01 | 4.01 | 4.01 | 4.01 | 4.01 | 4.01 | 4.01 | 4.01 | 4.01 | 4.01 | 4.01 | 4.01 | 4.01 | 4.01 | 4.01 | 4.01 | 4.01 | 4.01 | 4.01 | 4.01 | 4.01 | 4.01 | 4.01 | 4.01 | 4.01 | 4.01 | 4.01 | 4.01 | 4.01 | 4.01 | 4.01 | 4.01 | 4.01 | 4.01 | 4.01 | 4.01 | 4.01 | 4.01 | 4.01 | 4.01 | 4.01 | 4.01 | 4.01 | 4.01 | 4.01 | 4.01 | 4.01 | 4.01 | 4.01 | 4.01 | 4.01 | 4.01 | 4.01 | 4.01 | 4.01 | 4.01 | 4.01 | 4.01 | 4.01 | 4.01 | 4.01 | 4.01 | 4.01 | 4.01 | 4.01 | 4.01 | 4.01 | 4.01 | 4.01 | 4.01 | 4.01 | 4.01 | 4.01 | 4.01 | 4.01 | 4.01 | 4.01 | 4.01 | 4.01 | 4.01 | 4.01 | 4.01 | 4.01 | 4.01 | 4.01 | 4.01 | 4.01 | 4.01 | 4.01 | 4.01 | 4.01 | 4.01 | 4.01 | 4.01 | 4.01 | 4.01 | 4.01 | 4.01 | 4.01 | 4.01 | 4.01 | 4.01 | 4.01 | 4.01 | 4.01 | 4.01 | 4.01 | 4.01 | 4.01 | 4.01 | 4.01 | 4.01 | 4.01 | 4.01 | 4.01 | 4.01 | 4.01 | 4.01 | 4.01 | 4.01 | 4.01 | 4.01 | 4.01 | 4.01 | 4.01 | 4.01 | 4.01 | 4.01 | 4.01 | 4.01 | 4.01 | 4.01 | 4.01 | 4.01 | 4.01 | 4.01 | 4.01 | 4.01 | 4.01 | 4.01 | 4.01 | 4.01 | 4.01 | 4.01 | 4.01 | 4.01 | 4.01 | 4.01 | 4.01 | 4.01 | 4.01 | 4.01 | 4.01 | 4.01 | 4.01 | 4.01 | 4.01 | 4.01 | 4.01 | 4.01 | 4.01 | 4.01 | 4.01 | 4.01 | 4.01 | 4.01 | 4.01 | 4.01 | 4.01 | 4.01 | 4.01 | 4.01 | 4.01 | 4.01 | 4.01 | 4.01 | 4.01 | 4.01 | 4.01 | 4.01 | 4.01 | 4.01 | 4.01 | 4.01 | 4.01 | 4.01 | 4.01 | 4.01 | 4.01 | 4.01 | 4.01 | 4.01 | 4.01 | 4.01 | 4.01 | 4.01 | 4.01 | 4.01 | 4.01 | 4.01 | 4

DARPA Funding: | 0: | 0.0|

ĸĸ<del>ĸĸĸĸĸĸĸĸĸĸĸĸĸĸĸĸĸĸĸĸĸĸĸĸĸĸĸĸĸĸĸĸ</del>

15-MAR-85 12:25:02

MODULE: INPCHK

SERVICE: ARMY

REFERENCE No:	IA-85- 38!
KEY No:	1 51   181   1431
PROJECT Title:	ICB DECONTAMINATION & CONTAMINATION AVOIDANCE
PROJECT No:	11L162706A553F
CLASSIFICATION:	:UCI
TASK Title:	IFEASIBILITY OF AUTOMATED DECON
PERFORMING ORG:	I AMCCOM
PO ADDRESS:	ICRDC APR MD 21010-5423

FYDO FUNDING ( RDTRE ) (# in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
6. 1	0	ହ	•	Ø	<b>Q</b>	. 0
6. 2	P	200	0	20	20	Ö
6. 3A	ø	0	Ø.	Ø	2	ดิ
6. 3P	P	0	Ø	0	9	ē
6, 4	0	Ø	0	8	ä	à

FYDP FUNDING [ 6.1-6.4 ] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
IN-H	Ø Ø	50 150	Ø Ø	Ø	Ø Ø	න න

UNFUNDED [ 6.1-6.4 ] (\* in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
IN-H	Ø	ହ	છ	জ	ଦ	Ø
	Ø	ବ	જ	জ	ଅ	Ø

MAN YEAR(5): 1 0.01 | 0.51 | 0.01 | 0.01 | 0.01 | 0.01

JOINT PROJECT: 1+++1

DARPA Funding: | 0| | 0.0|

<sup>法</sup>环境 清晰素素 医毒素 化水油 医毒素 医毒素 医毒素 医水管 有有有效 有力 有力 有力 有力 化甲基苯酚 化水油 医布拉斯氏 医皮肤 医皮肤 医皮肤 医皮肤皮肤 化克斯特氏

### ROBOTIC INFORMATION SYSTEM

15-MAR-85 32:25:24

MODULE: INPCHK

SERVICE: ARMY

KEY No: PROJECT PROJECT CLASSIF: TASK Tit PERFORM: PO ADDRE	Title: No: ICATION: LIE: ING ORG:	IADVANCED C	I ATERTOWN MA	9 <b>0</b> 2172-0		AGILE AUTO	) VEH
FYDD FL	JOING (	RDT&E ] (\$	in THOUSANI	05)			
	FY84	FY85	FY86	=Y87	FY88	FY89	
6.1	Q	Ø	ø	Ø	Ø.	<b>2</b> 0	
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6.38	è	Ŕ	ě	ž.	va.	ě	
6.4	ě	ė	à	ě	Ø	ě	
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IN-H	9	20	Ø	Ø	Ø	0	
CONT	124	0	Ø	20	Ø	e e	
UNFUNDE	ED [ 6.1-	6.4 ] (\$ in FY85	THOUSANDS)	FY87	FY88	FY89	
IN-H	ø	e	2	Ø	ø	ø	
CONT	é	ø	8	võ	ହ	Ø.	
MAN YEAR WORK UNI JOINT PR DARPA FU	R(s): T SUM: ROJECT:	0.9    0.0  ***********  +++    124   129	1 1 103, 201 1 1 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	୍ଦ.ହା । ଉ	_	-	

15-MAR-85 12:25:45

MODULE: INPCHK

SERVICE: ARMY

REFERENCE No: 1A-85- 401

PROJECT CLASSIFI TASK Tit	Title: No: CATION:	JEW CRITICA	W TECHNIQUE 104		!					
PO ADDRE			HILL FARMS	STATION	WARRENTON V	'A 221 <b>86</b>	ı			
FYDP FL	FYDP FUNDING ( RDT&E ) (\$ in THOUSANDS)									
	FY84	FY85	FY86	FY87	FY88	FY89				
6. 1	Ø	Ø	0	Ø	ø	. 6				
6.2	75	340	291	196	Ø	Ø				
6. 3A	Ø	0	Ø	Ø	612	2236				
6.3B	Ø	Ø	Ø	Ø	•	Ø				
6.4	Ø	0	0	Ø	ହ	Ø				
FYDP FI	JNDING (	6.1-6.4 ] (	\$ in THOUSE	ANDS)						
	FY84	FY85	FY86	FY87	. FY88	FY89				
IN-H	25	50	25	25	150	37 <b>0</b>				
CONT	50	290	266	171	462	1996				
		5.4 ] (\$ in			. •					
	FY84	FY85	FY86	FY87	FY88	FY89				
IN-H	Ø	Ø	Ø	Ø	Ø	Ø	,			
CONT	Ø	Ø	Ø:	Ø	2	<b>©</b> 1				
WORK UNI	T SUM: ROJECT:		1 1	। ଜ.ଞା । : ।	1.51   3.01					

Page B-41

15-MAR-85 12:26:49

MODULE: INPCHK

SERVICE: ARMY

REFERENCE No:

JOINT PROJECT: 1+++1

DARPA Funding: | 100| | 20.0|

KEY No:

1A-85- 411

131 191 1101

SART MANA		1 31 1 31	1 3 40 1			
PROJECT T	itle:	IMATERIALS	HANDLING R	OBOTICS TE	CH BASE	
PROJECT N	los	1	i			
CLASSIFIC	ATION:	TUCT				
TASK Titl		I + AS ABOVE	*			1
PERFORMIN			•			i
		· ——	225			,
PO ADDRES	15:	IAPG MD 21	005			
				_	•	
FYDP FUN	DING C	RDT&E ] (\$	in THOUSAN	DS)		
	FY84	FY85	FY86	FY87	FYBB	FY89
						•
6.1	Ø	0	ជា	Ø	0	<b>(</b> 2)
6.2	580	425	650	725	950	950
6.3A	100	200	ବ୍ୟବ	20	2	Ø)
6.3B	0	0	2	ò	ē	20
6.4	ø	8	2	21	ø	20
G. 4	*	v	w.	v	•	₩,1
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1 15- 101		u	- 111 111200			
	FY84	FY85	FY36	FY87	FY88	FY89
			, 133			. 132
IN-H	480	425	325	ବେହ	950	950
CONT	200	200	325	125	Ø.	Ø
UNFUNDED	t 6.1-	6.4 ] (\$ in	THOUSANDS	3)		
	FY84	FY85	FY86	FY87	FY88	FY <b>8</b> 9
IN-H	Ø	225	Ø	Ø	Ø	Ø
CONT	Ø	2	27	ē.	Ž.	21

MAN YEAR(s): | 0.81 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1

ROBOTIC INFORMATION SYSTEM

15-MAR-85 12:27:10

MODULE: INPCHK

SERVICE: ARMY

REFERENCE No: 10-85- 421

KEY No: 1491 1 01 1 01

PROJECT Title: IROBOTICS INTEGRATION CENTER

PROJECT No:

CLASSIFICATION: IUCI

TASK Title: I\* AS ABOVE \*

PERFORMING ORG: HEL

PO ADDRESS: IAPG MD 21005

FYDP FUNDING ( RDT&E ) (\* in THOUSANDS)

	FY84	FY85	FY86	FYA7	FY88	FY89
6.1	. 101	Ø	Ø	Ø	Ø	@
6.2	225	445	520	570	620	670
6.3A	0	0	Ø	Ø	2	0
6.3B	Ø	<b>®</b>	Ø	2	27	ā
6.4	20	<b>(2</b> )	ί <b>λ</b>	171	171	ā

FYDP FUNDING [ 6.1-6.4 ] (# in THOUSANDS)

	FY84	FY85	FYB6	FY87	FY88	FY89
IN-H	100	<b>ଅଟ</b> ଡ	<b>ଅ</b> ନ୍ଦ <b>ନ</b>	200	200	200
CONT	125	245	320	370	420	470

UNFUNDED [ 6.1-6.4 ] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	EA83
IN-H	Ø	Ø	୬	Ø	29	ହ
CONT	Ø	Ø	ବ		29	ହ

MAN YEAR(s): | 1.0| | 2.0| | 2.0| | 2.0| | 2.0| | 2.0|

WORK UNIT SUM: IDAOG9299 + II

JOINT PROJECT: 1+++1

DARPA Funding: | @| | 0.01.

AND CONTRACTOR OF THE PROPERTY OF THE PROPERTY

#### ROBOTIC INFORMATION SYSTEM

15-MAR-85 12:27:31

MODULE: INPCHK

SERVICE: ARMY

REFERENCE No: 1P-85- 431

KEY No: 1 81 1 91 1 01

PROJECT Title: | RESEARCH IN ADVANCED MATERIEL SYS

PROJECT No: 1

CLASSIFICATION: | UC|

TASK Title: I\* AS ABOVE \*

PERFORMING ORG: !HEL

PO ADDRESS: IAPS MD 21005

#### FYDP FUNDING [ RDT&E ] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
6.1	0	9	ଦ	Ø	Ø	0
5.2	100	100	ହା	Ø	Ø	(2)
6.3A	Ø	(7)	7)	120	Ø	ଷ
6.3B	Ø	Ø	Ø	Ø	Ø	129
6.4	Ø	Ø	Ø	Ø	Ø	ଡ

#### FYDP FUNDING [ 6.1-6.4 ] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY83
IN-H	0	Ø	ହ	ହ	ଫ	ହ
CONT	100	1 Ø Ø	ଅ	ହ	ଉ	ଅ

#### UNFUNDED [ 6.1-6.4 ] (\$ in THOUSANDS)

	FY84	FY85	FY85	FY87	FY88	FY89
IN-H	ø	ø	2	Ø	, ø	Ø
CONT	Ø	0	Ø	0	Ø	6

MAN YEAR(#): 1 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01

WORK UNIT SUM: IDAOG3817 + II

JOINT PROJECT: 1+++1

DARPA Funding: | @| | 0.0|

REFERENCE No:

1A-85- 441

ROBOTIC INFORMATION SYSTEM

15-MAR-85 12:27:53

MODULE: INPCHK

SERVICE: ARMY

i 51 1501 1 21 KEY No: IMANIPULATOR EQUIPPED MOBILE TESTBED RESEARCH PROGRAM PROJECT Title: PROJECT No: CLASSIFICATION: IUCI TASK Title: 14 AS ABOVE \* PERFORMING ORG: IHEL 1APG MD 21005 PO ADDRESS: FYDP FUNDING [ RDT&E ] (\* in THOUSANDS) FY84 **FY85** FY86 FY87 FY88 FY89 6.1 0 0 Ø 475 525 700 700 25 325 6.2 6. 3A Ø 0 21 0 Ø 6. 3B Ø Ø 50 200 200 FYDP FUNDING [ 6.1-6.4 ] (\$ in THOUSANDS) FY84 FY85 FY86 FY87 FY88 FY89 475 525 700 700 25 250 IN-H 50 275 200 Ø CONT UNFUNDED [ 6.1-6.4 ] (\$ in THOUSANDS) FY89 FY84 FY85 **FY86** FY87 FY88 Ø IN-H CONT Ø 0 1 0.01 1 1.01 1 1.51 1 2.01 1 2.01 1 2.01 MAN YEAR(s): WORK UNIT SUM: **| \*\*\*\*\*\*\*\*\* | \*\*\*\*\*\*\*\*** JOINT PROJECT: 1+++1 01 1 0.01 DARPA Funding: 1

Page B-45

## ROBOTIC INFORMATION SYSTEM

15-MAR-85 12:28:14

MODULE: INPCHK

## SERVICE: ARMY

KEY No PROJEC PROJEC CLASSI TASK T PERFOR PO ADD	T Title: T No: FICATION: itle: MING ORG: RESS:	I IUCI I IHEL	DBOT INTERF			1 1
	FY84	FY85	FY86	FY87	FY88	FY89
6.1 6.2 6.39 6.38 6.4	0 150 0 0 0	0 300 0 0 0	0 500 0 0 0 (\$ in THOUS!	ମ ଦେଖ ମ ମ ମ ମ	ହ 55ଡ ଜ ଜ ଜ	700 ወ ወ የ
	FY84	FY85	FY86	FY87	FY88	FY89
IN-H CONT	75 75	150 150	250 250	300 300	300 350	ଞ୍ଚନ୍ଦ <b>4</b> ଷ୍ଟବ
UNFUN		-6.4] (\$ iv		,	=146.8	
	FY84	FY85	FY86	FY87	FY88	FY89
IN-H	<b>ଦ</b>	ያ: ያ:	Ø Ø	Ø Ø	ହ ହ	Ø Ø
WORK U JOINT	NIT SUM:	1+++1	51   2.51   1   0.01	<b>3.0</b>     3.	.01   3.01	

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#### ROBOTIC INFORMATION SYSTEM

15-MAR-85 12:28:36

MODULE: INPCHK

SERVICE: ARMY

REFERENCE No: 19-85- 461

151 191 1101 KEY No:

PROJECT Title: IFIELD MATERIALS HANDLING ROBOT
PROJECT No: | |

CLASSIFICATION: IUCI

TASK Title: I\* AS ABOVE \*

PERFORMING ORG: IHEL

PO ADDRESS: IAPG MD 21005

#### FYDR FUNDING [ RDT&E ] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
6.1	0	0	ø	Ø	0	Ø
<b>6.</b> 2	Ø	2000	1000	1000	500	750
6.3A	Ø	Ø	Ø	0	Ø	ହ
6.3B	Ø	0	Ø	Ø	Ø	ଡ
6.4	Ø	20	Ø	Ø	2	0

## FYDP FUNDING [ 6.1-6.4 ] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
IN-H	Ø	0	०	ହ	Ø	Ø
CONT		2000	१०००	1 ହେଉ	<b>5</b> Ø%	75Ø

## UNFUNDED [ 6.1-6.4 ] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
IN-H	Ø	Ø	Ø	ø	ø	ø
CONT	ø	20	Ø	Ø	Ø.	6

MAN' YEAR(s): | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| | @.@| |

JOINT PROJECT: 1+++1

DARPA Funding: | 0| | 0.01

## ROBOTIC INFORMATION SYSTEM

15-MAR-85 12:28:58

MODULE: INFCHK

SERVICE: ARMY

TASK Tit PERFORMI PO ADDRE	Title: ! No: ! CATION: ! le: ! NG ORG: ! SS: !	RETINA-MODI HEL	I I EL ARTIFIC DØS		SYSTEM	1 1
	FY84	FY85	FY86	FY87	FY88	FY89
6. 1	Ø	160	Ø	Ø	Ø	8
6, 2	õ	ē	290	ø	Ø	ē
6. 3A	è	ā	20	120	ō	ei ei
6. 3B	Ž.	ě	õ	200	160	20
6. 4	a	à	20	200	120	120
FYD¤ FU	NDING ( 5	.1-6.4 ] (: FY85	in THOUS	ANDS) FY87	FY88	FY89
IN-H	ø	160	180	293	187	80
CONT	ã	8	110	27	93	40
<u> </u>	_	.4] (\$ in			30	76
GIAL CHAP		4 3 (= 111	( "JOGSHINDS	•		
	FY84	FY85	FY86	FY87	FY88	FY89
IN-H	0	Ø .	Ø	ø	ø	ø
CONT	Ø	Ø	ହ	Ø	29	<b>©</b> 1
MAN YEAR WORK UNI JOINT PR	T SUM: I	0.01   0.1 ********** +++	***		.51   0.51	

Page B-48

## ROBOTIC INFORMATION SYSTEM

15-MAR-85 12:29:19

MODULE: INPCHK

SERVICE: ARMY

REFERENCE KEY No: PROJECT N PROJECT N CLASSIFIC TASK Titl PERFORMIN PO ADDRES	Title: Io: CATION: E: IG ORG:	ROBOTIC OB	। 48ଫ9ଡ		AULT TANK	(ROBAT) !
	FY84	FY85	FY86	FY87	FY88	FY89
6.1	28	Ø	0	Ø	21	. 0
6.2	ø.	Ø	20	ø	õ	Ŷ.
6.3A	ø	e e	Ž	ā	ē	20
G. 3B	3398	3682	2188	ø	ē	Ø
6.4	Ø	0	8	Ø	8	ହ
FYDP FUN	DING C	6.1-6.4 ] (	\$ in THOUS	ANDS)		
	FY84	FY85	FY86	FY87	FY88	FY89
IN-H	2380	3198	915	Ø	Ø	9
CONT	1018	484	1273	ā	ø	è
UNFUNDED	t 6.1-	6.43 (\$ in	THOUSANDS	>		
	FY84	FY85	FY86	FY87	FY88	FY89
IN-H	ø	100	ଌଉଡ	ø	Ø	Ø
CONT	0	300	Ø	Ø	Ø	ହ
MAN YEAR ( WORK UNIT JOINT PRO DARPA Fun	SUM: JECT:	0.0    0.  ******** !+++    0			.ଡ!   ଡ.ବ	

Page B-49

#### ROBOTIC INFORMATION SYSTEM

15-MAR-85 12:29:41

MODULE: INPCHK

SERVICE: PRMY

REFERENCE No: 18-85- 491 KEY No: 1 11 1431 1 01

PROJECT Title: ISMALL BUSINESS INDVATED RESEARCH

PROJECT No: IIL6655@2MM4@

CLASSIFICATION: IUCI

TASK Title: ITERRAIN OBSTACLE AVOIDANCE SYSTEM

PERFORMING ORG: !TROSCOM

PO ADDRESS: IBRDC FT BELVOIR VA 22060

## FYDD FUNDING [ RDT&E ] (\$ in THOUSANDS)

	FY84	FY85	FYBS	FY87	FY88	5483
6. 1	50	200	100	ø	Ø.	. @
6.2	⊘.	Ø	<sub>©</sub>	Ω <u>̃</u>	Ø	ହ
6.39	Ø	Ø	ক	<b>, 20</b>	Ø	<b>©</b> 1
6. 3B	2	Ø	Ø,	Ø	Ø	Ø.
6.4	Ø	Ø	Ø	ফ	Ø	ହ

## FYDP FUNDING [ 6.1-6.4 ] (\* in THOUSANDS)

	FY84	FY85	FY86	FY87	FY89	FY89
IN-H	0	@	Ø	Ø	. 20	ø
CONT	50	. 500	100	Ø	থ	Ø

## UNFUNDED [ 6.1-6.4 ] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
IN-H	Ø	ø	Ø.	Ø	প্ৰ	Ø
CONT	0	Ø	প্ত	Ø	ছ	න

MAN YEAR(s): | | 0.0| | 0.0| | 0.0| | 0.0| | 0.0|

WORK UNIT SUM: | +++++++++ | | +++++++++

JOINT PROJECT: 1+++1

DARPA Funding: ! 01 | 0.01

ROBOTIC INFORMATION SYSTEM

15-MAR-85 12:30:02

MODULE: INPCHK

SERVICE: ARMY

REFERENCE No: 1A-85- 501

KEY No: 1 61 1891 1361

PROJECT Title: IHIGH PRODUCTIVITY METAL WORKING

TASK Title:

PERFORMING ORG: IAMMRC

PO ADDRESS:

## FYDP FUNDING ( RDT&E ) (\$ in THOUSANDS)

	FY84	FY85	E486	FY87	FY88	FY89
6. 1	@	ø	æ	Ø,	æ	0
6.8	Ø	Ø	Ø	Ø	Ø	Ø
6.3A	Ø	<b>@</b>	0	<b>₽</b>	Ŋ	Ø,
G. 3B	110	111	275	150	Ø	Ø
6.4	Ø	Ø	Ø	Ø	Ø	Ø

## FYDP FUNDING [ 6.1-6.4 ] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FYSB	FY89
IN-H.	42	61	75	50	Ø	Ø
CONT	70	50	200	100	v.	Ø

## UNFUNDED [ 6.1-6.4 ] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY89	FY89
IN-H	ø	Ø	Ø	Ø	Ø	2
CONT	Ø	(S)	900	27	Ø	ହା

MAN YEAR(s): | 1.01 | 1.01 | 1.01 | 0.51 | 0.01 | 0.01

WORK UNIT SUM: IDA301288 I ISERT 84 I

JOINT PROJECT: 1+++1

DARPA Funding: | 0| | 0.0|

#### ROBOTIC INFORMATION SYSTEM

14-MAR-85 15:25:04

MODULE: INPCHK

SERVICE: NAVY

REFERENCE No: IN-85- 11 1 11 1501 1 01 KEY No: PROJECT Title: IMOBILE ROBOT FOR HAZARDOUS DUTY PROJECT No: CLASSIFICATION: IUCI TASK Title: PERFORMING ORG: INSWC

ISILVER SPRING MD 20910

FYDP FUNDING [ RDT&E ] (\$ in THOUSANDS)

PO ADDRESS:

	FY84	FY85	FY86	FY87	FY88	FY89
6. 1	0	<b>v</b> a	Ø	Ø	ø	8
6.2	55	2	Ø	Ø	Ø	2
6. 3A	0	0	0	Ø	Ø	6
6.3B	0	Ø	Ø	Ø	Ø	. 6
6.4	0	Ø	Ø	Ø	Ø	6

FYDP FUNDING [ 6.1-6.4 ] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
IN-H	5	Ø	Ø	Ø	Ø	ø
CONT	50	Ø	Ø	Ø	0	20

UNFUNDED ( 6.1-6.4 ) (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
IN-H	0	15	Ø	Ø	2	Ø
CONT	Ø	150	Ø	Ø	Ø	<b>Ø</b>

OPN FUNDING (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
TOTAL	<b>Ø</b>	Ø	Ø	Ø	Q	Ø.

MAN YEAR(s): ା ହ. 1 | ବ. ହା | ହ. ହା | ହ. ହା | ହ. ହା | ହ. ହା

WORK UNIT SUM: | \*\*\*\*\*\*\*\* | | \*\*\*\*\*\*\*\*\* | JOINT PROJECT: | +++ | DARPA Funding: | 0 | | 0.0 |

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#### ROBOTIC INFORMATION SYSTEM

14-MAR-85 15:25:26

MODULE: INPCHK

SERVICE: NAVY

REFERENCE No: IN-85- 21
KEY No: I 41 1291 1371
PROJECT Title: IROBOTICS FOR ASSEMBLY
PROJECT No: I I
CLASSIFICATION: IUC1
TASK Title: IROBOTIC ASSEMBLY TOOLING
PERFORMING ORG: INSWC

FYDP FUNDING [ RDT&E ] (\$ in THOUSANDS)

PO ADDRESS:

	FY84	FY85	FY86	FY87	FY88	FY89
6.1	0	0	ହ	8	Ø	ଡ
6.2	<b>5</b> 5	9	Ø	9	Ø	0
6.3A	Ø	0	0	. 0	0	ହ
6.3B	Ø	Ø	0	0	<b>©</b>	0
6.4	Ø	0	Ø	0	0	. 6

ISILVER SPRING MD 20910

FYDP FUNDING [ 6.1-6.4 ] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FYBB	FY89
IN-H	5	9	Ø	9	0	0
CONT	50	9	Ø	9	0	Ø.

UNFUNDED ( 6.1-6.4 ) (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
IN-H	Ø	15	Ø	Ø	Ø	Ø
CONT		1 <b>50</b>	Ø	Ø	Ø	Ø

OPN FUNDING (\* in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
TOTAL	Ø	6	Ø	Ø	Ø	8

MAN YEAR(s): ! 0.1| | 0.0| | 0.0| | 0.0| | 0.0| | 0.0| | 0.0|

JOINT PROJECT: 1+++1

DARPA Funding: | @| | @.@|

#### ROBOTIC INFORMATION SYSTEM

14-MAR-85 15:25:49

MODULE: INPCHK

SERVICE: NAVY

REFERENCE No: IN-85- 31
KEY No: I 81 1291 1371
PROJECT Title: IROBOTICS FOR ASSEMBLY
PROJECT No: I 1

CLASSIFICATION: !UC!
TASK Title: !COMPUTER INTEGRATED WORK CELL

PERFORMING ORG: INSWC

PO ADDRESS: ISILVER SPRING MD 20910

#### FYDP FUNDING [ RDT&E ] (\$ in THOUSANDS)

	FY84	FY85	FYB6	FY87	FY88	FY89
6.1	Ø	Ø	হ	ø	æ	0
6.2	74	Ø	Ø	Ø	Ø	Ø
6.3A	0	Ø	Ø.	Ø	Ø	ହ
6. 3P	0	Ø	<b>Ø</b>	0	0	0
6.4	Ø	Ø	6	<b>@</b>	Ø	. 6

## FYDP FUNDING [ 6.1-6.4 ] (\* in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FYA9
IN-H	7	Ø	थे	Ø	<i>ଉ</i>	Ø
CONT	67	Ø	क	Ø	ହ	Ø

#### UNFUNDED ( 6.1-6.4 ) (\$ in THOUSANDS)

	FY34	FY85	FY86	FY87	FY88	FY89
IN-H	Ø	15	Ø	Ø	Ø	છે
CONT	Ø	150	Ø		Ø	છ

#### OPN FUNDING (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
TOTAL	ø	Ø	2	0	Ø	ଡ

MAN YEAR(s): | 0.11 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01

WORK UNIT SUM: | ++++++++++ | | +++++++++

JOINT PROJECT: 1+++1

DARPA Funding: | 01 | 0.01

#### ROLOTIC INFORMATION SYSTEM

14-MAR-85 15:26:12

MODULE: INPOHK

SERVICE: NAVY

REFLRENCE No: 1N-85- 41
KEY No: 131 1291 3341
PROJECT Title: IREAL-TIME 3-D COMPUTER VISION
PROJECT No: 1 1
CLASSIFICATION: 1UC1
TASK Title: 1
PERFORMING CRG: INSWC
PO ADDRESS: 1SILVER SPRING MD 20910

FYDP FUNDING ( RDT&E ) (\* in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
6. 1	Ø	v	থ	Ø	Ø	Ø
6. 2	71	Ø1	Ø	Ø	Ø	Ø
6.3A	0	8	Ø	Ø	Ø	Ø
6.38	Ø	Ø	Ø	₽.	Ø	. 2
6.4	Ø	Ø	Q	Ø	Ø	Ø

FYDD FUNDING ( 6.1-6.4 ) (\* in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
IN-H	6	ହ	Ø	2	ହ	. 0
CONT	65	ନ	Ø	@	ହ	

UNFUNDED [ 6.1-6.4 ] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY67	FY88	FY89
IN-H	0	15	ପ	Ø	Ø	0
CONT	Ø	150	Ø	Ø	Q.	0

OPN FUNDING (\$ in THOUSANDS)

	FY84	FY85	FYB6	FY87	FYBB	FY89
TOTAL	Ø	Ø	o	Ø	Ø	হ

MAN YEAR(s): | 0.1| | 0.0| | 0.0| | 0.0| | 0.0|

WORK UNIT SUM: | \*\*\*\*\*\*\* | | \*\*\*\*\*\*\*\*

JOINT PROJECT: 1+++1

DARPA Funding: | 0| | 0.0|

# ROBOTIC INFORMATION SYSTEM

14-MAR-85 15:26:43

MODULE: INPCHK

SERVICE: NAVY

PROJECT CLASSIFI TASK Tit PERFORMI PO ADDRE	Title: No: CATION: le: NG ORG:	PASSIVE 3-1 DMN-84014	ING MD 209	1 <b>0</b>	APPLICATIO I	
	FY84	FY85	FY86	FY87	FY88	FY89
- 4		•				
6.1 6.2	0 150	ହ ହ	Q Ø	S S	0	0
6. 3A	350	350	Ø)	Ø	ହ ସ	. Ø
6.38	0	200	õ	õ	ø	0
6.4	ě	ø	a	ā	0	ค
FYDP FU	NDING C	5.1-6.4 ] ( <u>!</u>	in THOUS	ANDS)	_	
	FY84	FY85	FY86	FY87	FY88	FY89
IN-H	308	250	Ø	ø	ø	Ø
CONT	192	100	Ø.	120	ิ้ด	ହ
UNFUNDE	D [ 6.1-6	.4 ] (\$ iv	THOUSANDS	)		
	FY84	FY85	FY86	FY87	FY88	FY89
IN-H	0	0	Ø	Ø	Ø	Z)
CONT	0	Ġ.	Ø	Ø	Ø.	<b>©</b> 1
OPN FUN	DING (+	in THOUSANT	)S)			
	FY84	FY85	FY86	FY87	FY88	FY89
TOTAL	Ø	0	থ	2	Ø	Ø
MAN YEAR WORK UNI JOINT PR DARPA FU	T SUM:   DJECT: !	+++1	)   0.0         -	। ଡ.ଡା । ଡ ।	.ଡା । ଡ.ଡା	

Page B-56

## ROBOTIC INFORMATION SYSTEM

14-MAR-85 15:27:06

MODULE: INPCHK

SERVICE: NAVY

REFERENCE KEY No: PROJECT PROJECT CLASSIFITASK Tite PERFORMI PO ADDRESS	Title: No: CATION: :le: ING QRG:	1	1		TOMATION A	PPL. STUDY
FYDP FL	JNDING C	RDT&E ] (\$	in THOUSAN	(20		
	FY84	FY85	FY86	FY87	FY88	FY89
6. 1	0	Ø	Ø	0	0	ø
6. 2	35	Ø	Ø	Ø	Ø	Ø
6. 3A	Ø	Ø.	Ø	Ø	Ø	ହ
6. 3B	Ø	Ø	Ø	Ø	0	. 6
6.4	Ø	. 0	Ø	Ø	Ø	Ø
FYDP FL	UNDING C	6.1-6.4 J (	in THOUS	ANDS)		•
	FY84	FY85	FY86	FY87	FY88	FY89
IN-H	35	ø	Ø	Ø	Ø	Ø
CONT	Ø	Ø	Ø	Ø	Ø	ହ
UNFUNDE	D C 6. 1.	-6.4 ] (\$ in	THOUSANDS	<b>)</b>		
	FY84	FY85	FY86	FY87	FY88	FY89
IN-H	Ø	50	Ø	Ø	9	Ø
CONT	Ø	0	Ø.	Ø	Ø	<b>©</b> 1
OPN FUN	DING (	in THOUSAN	)S)			
	FY84	FY85	FY86	FY87	FY88	FY89
TOTAL	Ø	0	Ø1	Ø	Ø	0
MAN YEAR WORK UNI JOINT PR DARPA FU	T SUM: ROJECT:	*********   +++	71   0.01 **  !**** 7.01		.ଥା । ଅ.ଅ।	

#### ROBOTIC INFORMATION SYSTEM

14-MAR-85 :5:27:29

MODULE: INPCHK

SERVICE: NAVY

REFERENCE NO: IN-65- 71 1 8: (29) (37) KEY No: PROJECT Title: : : USE OF ROBOTICS IN AUTOMATIC FACTORY ASSEMBLY PROJECT No: i CLASSIFICATION: IUCI IMULTIPLE ROBOT APPLICATIONS TASK Title: PERFORMING ORG: INSWC ISILVER SPRING MD 20910 PO ADDRESS:

FYDP FUNDING ( RDT&E ) (\$ in THOUSANDS)

	FY84	FY85	FY36	.FY87	FY88	EAA2
6. 1	ą,	Zi	æ	Z,	Ø.	ø
6.2	55	Ø	Ø	Ø	Ø	Z
6. 3A	Ø	Ÿ.	Z	Œ.	Z	Ø
6.33	ø	Ü	a	Ø.	Ø	ق
ō. 4	Ø	Ø	Z	Ø	Ø	Ø

FYD2 FUNDING 1 5.1-6.4 3 (\$ in THOUSANDS)

	FY84	FY85	EY86	FY87	FY88	FY89
IN-H	5	হু।	2)	\$1	ক	ହ
CONT	50	ত	25	20	ত	ଅ

UNFUNDED [ 6.1-6.4 ] (\* in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
IN-H CONT	ża za	ø a	Ø Ø	و ي	2) 2)	ē.
CONT	20	v.	•	₩.1	· ·	Q.

OPN FUNDING (# in THOUSANDS)

	FY84	FY85	FY86	FY87	FYS8	FY89
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JOINT PROJECT: 1+++1

DARPA Funding: | Øi | Ø. 0|

#### ROBOTIC INFORMATION SYSTEM

14-MAR-85 15:27:52

MODULE: INPCHK

SERVICE: NAVY

REFERENCE No: IN-85- 8!
KEY No: | 0| |41| |43|
PROJECT Title: | CONFORM
PROJECT No: | 184-T2B
CLASSIFICATION: | UC|
TASK Title: | ROBOTICS
PERFORMING ORG: | INAVSEA

PO ADDRESS:

#### FYDP FUNDING [ RDT&E ] (\* in THOUSANDS)

IWASHINGTON DC 20362

	FY84	FY85	FY86	FY87	FY88	FY89
6, 1	Ø	Ø	Ø	Ø	Ø	0
6.2	0	Ø	2	Ø	Ø.	0
6.3A	35	Ø	Ø	Ø	0	Ø
6.3B	Ø	Ø	0	Ø	0	0
6.4	Ø	Ø	Ø	Ø	Ø	` <b>@</b>

## FYDP FUNDING [ 6.1-6.4 ] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
IN-H	35	Ø	ହ	ହ	ው	Ø
CONT	Ø	Ø	ଉ	ଉ	Ø	Ø

## UNFUNDED ( 6.1-6.4 ) (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
IN-H	Ø	25	<b>የ</b>	Ø	Ø	Ø
CONT		0	የ	Ø	Ø	Ø

#### OPN FUNDING (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
TOTAL	. 20	Q	Ø	Ø	Ø	ପ

MAN YEAR(s): 1 0.01 | 0.01 | 0.01 | 0.01 | 0.01

WORK UNIT SUM: | \*\*\*\*\*\*\*\* | | \*\*\*\*\*\*\*\*

JOINT PROJECT: !+++1

DARPA Funding: | 0| | 0.01

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ROBOTIC INFORMATION SYSTEM

14-MAR-85 15:28:15

MODULE: INPCHK

SERVICE: NAVY

REFERENCE No: IN-85- 91
KEY No: I 01 1501 1291
PROJECT Title: ICONFORM
PROJECT No: I I
CLASSIFICATION: IUC!
TASK Title: IADV BASE REPAIR SHIP TECH RISK ASSES I
PERFORMING ORG: INAVSEA I
PO ADDRESS: IWASHINGTON DC 20362

FYDP FUNDING [ RDT&E ] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
6. 1	0	Ø	Ø	0	0	0
6.2	0	2	0	0	Ø	0
6. 3A	25	0	Ø	. 0	0	Ø
6. 3B	Ø	0	0	Ø	6	. 0
6.4	0	0	Ø	Ø	Ø	Ø

FYDP FUNDING [ 5,1-6,4 ] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
IN-H	<b>9</b>	Ø	Ø	ହ	Ø	Ø
CONT	23	Ø	Ø	ଷ	Ø	Ø

UNFUNDED [ 6.1-6.4 ] (\* in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
IN-H	0	0	Ø	Ø	Ø	ଡ
CONT		0	Ø	Ø	Ø	୧

OPN FUNDING (\$ in THOUSANDS)

	FY84	FY85	FY <b>86</b>	FY87	FY88	FY89
TOTAL	0	.@	Ø	ø	Ø	Ø

MAN YEAR(s): | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01

JOINT PROJECT: 1+++1

DARPA Funding: | 01 | 0.0|

#### ROBOTIC INFORMATION SYSTEM

14-MAR-85 15:28:48

MODULE: INPCHK

SERVICE: NAVY

PROJECT CLASSIFI TASK Tit PERFORMI PO ADDRE	Title: No: CATION: le: NG ORG:	1	NG ROBOTICS		R ASSISTED	METALWOR	RK I NG
	FY84	FY85	FY86	FY87	FY88	FY <b>89</b>	
6.1 6.2 6.3A 6.3B 6.4	8088 8088 80	8 2350 8 9	4650 0 0 0	Ø 8ØØ Ø Ø	ଫ ଫ ଫ ଫ	ହ ହ ହ	• •
FYDP FU	FY84	6.1-6.4 ] ( FY85	FY86	FY87	FY88	FY89	
	F 104	F 165	F 106	P 407	F 188	FYGS	
IN-H CONT	ର ଅବସ୍	0 2350	ଡ 465ଡ	ଅ ଓଅସ	Ø Ø	ହ ଜ	
UNFUNDE	D C 6.1-6	5.4 ] (\$ in	THOUSANDS)				
	FY84	FY85	FY86	FY87	FY88	FY89	
IN-H	0	Ø	Ø	Ø	ହ	Ø	
CONT	0	Ø	20	Ø	Ø	ହ	
OPN FUN	DING (\$	in THOUSAN	DS)				
	FY84	FY85	FY86	FY87	FY88	FY89	7
TOTAL	Ø	Ø	Ŋ	0	Ø	ହ	
MAN YEAR WORK UNI JOINT PR DARPA Fu	T SUM: 1	1.5    1.5  DN191-077  +++    0	1 115 FEE		.ଡା   <b>ଡ</b> .ଡା		

## RUBOTIC INFORMATION SYSTEM

14-mAR-85 15:29:10

MODULE: INPCHK

SERVICE: NAVY

REFERENCE KEY NO: PROJECT N PROJECT N CLASSIFIC TASK Titl PERFORMIN PO ADDRES	itle: o: ATION: e: G ORG:	!  PE62761N  UC   NON-CONTAC	DC 20375		FILER	1 1
	FY84	FY85	FYBG	FY87	FY88	=787
6.1 6.2 6.3A 6.3B 6.4	ଦ 16ଡଡ ଡ ଡ ଡ	ୟ 18ଟନ ସ ଫ ଫ	\$\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	ୟ ପ ସ ସ ସ	ବ ବ ବ ବ ବ	0 0 0 0
FYDP FUN	DING :	6.1-6.4 3 (	s in THOUS	ANDS)		
	FY84	FY85	FYBS	FY87	FY88	FY89
IN-H CONT	Ø 16ØØ	ଡ 1 ୫ ଡ ଡ	Ø Ø .	ହା ୧୬	Ø.	Ø Ø
UNFUNDED	C 6.1-	5.4 J (\$ in	THOUSANDS	•		
	FY84	FY85	FY86	FY87	FYBB	FY89
IN-H CONT	ø ` Ø	Ø Ø	<b>છ</b> છ	<b>ያ</b>	Ø Ø	ହ ୧୯
OPN FUND	ING (\$	in THOUSANI	os)			
	FY84	FY85	FÝBS	FY87	FY88	EA83
TOTAL	0	Ø	Ø	Ø	نز.	0
MAN YEAR ( WORK UNIT JOINT PRO DARPA Fund	SUM: JECT:	0.0    0.0  **********  +++    0    0			.ଡା ା ଉ.ବା	

#### ROPOTIC INFORMATION SYSTEM

14-MAR-85 15:29:33

MODULE: INPCHK

SERVICE: NAVY

1311

REFERENCE No:

MAN YEAR(s): WORK UNIT SUM:

JOINT PROJECT: DARPA Funding:

IDNABB

01 1 0..01

INF I

KEY No:

IN-85- 121 I 41 | 1291

IROBOTIC MICROWAVE HYBRID SUBSTRATE ASSEMBLY PROJECT Title: PROJECT No: 1JM4@4 CLASSIFICATION: | UC| TASK Title: ı PERFORMING ORG: INOSC PO ADDPESS: ISAN DIEGO CA 92152 EYDP FUNDING [ RDT&E ] (\$ in THOUSANDS) FY84 FY85 FY86 FY87 FY88 EA83 0 0 6. 1 Ø Ø Ø 0 6.2 Ø 0 2 0 Ø **Ø** 6.3A 0 0 0 Ø Ø: 620 . 0 6.3B 0 Ø Ø FYDP FUNDING [ 6.1-6.4 ] (\$ in THOUSANDS) FY84 FY85 FY86 FY87 FY88 FY89 IN-H 120 Ø CONT 500 UNFUNDED [ 6.1-6.4 ] (\$ in THOUSANDS) FY85 FY84 FY86 FY87 FY88 **FY89** 0 0 Ø 2 Ø Ø IN-H CONT 6 OPN FUNDING (\$ in THOUSANDS) FY84 FY85 FY86 FY87 FY88 FY89 Ø TOTAL 0 Ø Ø

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1 1.41 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01

1 131 MAR 84 1

#### ROBOTIC INFORMATION SYSTEM

14-MAR-85 15:30:04

MODULE: INPCHK

SERVICE: NAVY

IN-85- 131 I 81 | 1291 | 1331 KEY No: IROBOTIC TRANSPARENCY RESTORATION PROJECT Title: IPNA 86-5 PROJECT No: CLASSIFICATION: IUCI TASK Title: PERFORMING ORG: INASC PO ADDRESS: IWASHINGTON DC 20361 FYDP FUNDING [ RDT&E ] (\$ in THOUSANDS) FY88 FY89 FY87 FY84 FY85 FY86 350 Ø 6. 1 Ø 6.2 0 Ø Ø Ø 0 6.3A **Ø** 6.3B 8 Ø 6.4 FYDP FUNDING [ 6.1-6.4 ] (\$ in THOUSANDS) FY87 FY88 FY89 FY84 FY85 FY86 Ø Ø IN-H 25 Ø 325 CONT 0 UNFUNDED [ 6.1-6.4 ] (\$ in THOUSANDS)

OPN FUNDING (\$ in THOUSANDS)

FY84

IN-H CONT

FY84 FY85 **FY86** FY87 FY88 FY89 350 .TOTAL

FY86

6

1 2.01 | 2.01 | 2.51 | 2.01 | 2.01 | 2.01 MAN YEAR (s) :

WORK UNIT SUM: [############] [##########]

FY85

1+++1 JOINT PROJECT:

REFERENCE No:

DARPA Funding: 1 01 1 0.01

Page B-64 .

FY87

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FYAB

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**FY89** 

ROBOTIC INFORMATION SYSTEM

1.4-MAR-85 15:30:26

MODULE: INPCHK

SERVICE: NAVY

REFERENCE No: IN-65- 141 1 81 1291 1361 KEY No: PROJECT Title: | COMBUSTION CHAMBER REWORK IPNA 86-7 PROJECT No: CLASSIFICATION: | UC| TASK Title: PERFORMING ORG: INASC PO ADDRESS: IWASHINGTON DC 20351

FYDP FUNDING [ RDT&E ] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
6. 1 6. 2	Ø Ø	ହ ହ	1350 Ø	ବ ଡ	Ø Ø	ଫ ଫ
6.3A 6.3B	Ø Ø	Ø	ହ ହ ବ	ହ ହ ହ	ହ ହ ହ	ଫ • <b>ଫ</b> ଫ
6.4 FYDP	FUNDING [ 6.	1-6.4 ] (				•
	FY84	FY85	FY86	FY87	FY88	FY89

	FY84	FY85	FY86	FY87	FY88	FY89
IN-H	Ø	Ø	50	Ø	Ø	ହ
CONT	Ø	Ø	1300	Ø		ଷ

UNFUNDED [ 6.1-6.4 ] (\$ in THOUSANDS)

	FY84	FY85	FYB6	FY87	FYBB	F 4 9 3
IN-H	0	0	ø	Ø	Q.	Ø
CONT	8	Ø.	Ø	Æ,	· ·	•

OPN FUNDING (\* in THOUSPNDS)

	FY84	FY85	FY86	FY87	FY88	FY89
TOTOL	a	Ø	21	Ø	28	Ø

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## ROBOTIC INFORMATION SYSTEM

14-MAR-85 15:30:50

MODULE: INPCHK

SERVICE: NAVY

REFERENCE KEY No: PROJECT PROJECT CLASSIFIC TASK Tit PERFORMIC PO ADDRES	Title:   Title:   No:   CATION:   Le:   NG ORG:		ı	AL		† 1
FYDP FU	NDING C F	RDT&E 3 (\$ 1	in THOUSAN	DS)		
	FY84	FY85	FYB6	FY87	FY88	FY89
6.1	Ø	ø	751	Ø	Ø	9
6.2	Ø	ø	ହ	Ø	Ø	Ø.
6.3A	Ø	Ø	Ø	Ø	マ	6
6.3P	Ø	Ø	Ø	2	Ø.	. @
6.4	Ø	ହ	জ	Ø	Ø	· 61
FYDP FU	NDING [	5.1-6.4 J (	in THOUS	ANDS)		
	FY84	FY8≅	FY86	FY87	FY88	FY89
IN-H	ø	ø	51	Ø	Ø	0
CONT	Ø.	Ø	790	Ø.	20	8
UNFUNDE	D C 6.1~6	5.4] (\$ in	THOUSENDS	)		
	FY84	FY85	FY86	FY87	FY88	FYSĐ
IN-H	Ø	ø	20	Ø.	Ø	Ø
CONT	Ø	Ø	12)	Ø	Ø.	Ø
OPN FUN	DING (\$	in THOUSAN	<b>D</b> S)			
	FY84	FY85	FYBS	FY87	FYSS	FY89
TOTAL	থ	Ø	ফ	Ø	ולי	Ø1
MAN YEAR WORK UNI JOINT PR DARPA FU	T SUM: OJECT:	0.0    0.   ##########  +++    0			.ଡା   ଜ.ଡା	

## ROBOTIC INFORMATION SYSTEM

14-MPR-85 15:31:13

MODULE: INPCHK

SERVICE: NAVY

TASK Tit	Title: No: CATION: le: NG ORG:	1	1	MALL PARTS	STRIPPER	1 1
FYDP FU	NDING C	RDT&E ] (\$ :	in THOUSAN	DS)		
	FY84	FY85	FY86	FY87	FY88	FY89
6. 1	0	Ø	45ଉଡ଼	20	Q	0
6. ≥	Ø	Ø	Ø	0	0	0
6. 3A	0	Ø	Ø	0	Š	Ø
6. 3B	0	Ø	20	8	Ø	. 0
6. 4	Ø	Ø.	ক	Ø	&	ঞ
FYDP FU		5.1-6.4 ] (1			<b>-</b> 1/80	
	FY84	FY85	FY86	FY87	FY8G	FY89
IN-H	Ø	Ø	50	Ø	0)	20
CONT	Ø	ø	4450	Ø	Ø	7
UNFUNDE	D E 6,1-6	5.4 J (* in	THOUSANDS	)		
	FY84	FY85	FY86	FY87	FY88	FY89
IN-H	Ø	ø	Ø	en en	Ø	Ø
CONT	ā	Õ	ด	ā	va Va	ହ
OPN FUN	-	in THOUSAND	•	Į.	••	C
	FY84	FY85	FYB6	FY87	FY88	FY89
TOTAL	ø	Ø	Ø	Ø	Ø	<b>6</b> 0
MAN YEAR WORK UNI JOINT PRI DARPA Fui	T SUM: DJECT:	0.0    0.0  ************  +++    0    0		1 ወ.ወ! 1 ወ <del>***</del> *	.ଡା ୧ ଡ. ଡା	

Page B-67

#### ROBOTIC INFORMATION SYSTEM

14-MAR-85 15:31:36

MODULE: INPCHK

SERVICE: NAVY

REFERENCE No: IN-85- 171

KEY No: 1471 1291 1331

PROJECT Title: ILASER PAINT STRIPPER

PROJECT No: IPNA 86-26

CLASSIFICATION: |UC|

TASK Title:

----

PERFORMING ORG: INASC

PO ADDRESS: IWASHINGTON DC 20361

## FYDP FUNDING ( RDT&E ) (\* in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	. FY89
6. 1	Ø	ø	16500	Ø	Ø	Ø
6.2	ø	Ø	0	8	Ø	0
6. 3A	0	Ø	Q	Ø	<b>.</b>	29
6. 3B	0	Ø	8	0	Ø	. 15
6. 4	Ø	Ø	Ø.	•	Ø	Ø

## FYDP FUNDING [ 6.1-6.4 ] (\$ in THOUSANDS)

	FY84	FY85	F Y 8 6	FYS/	F 486	2014
IN-H	Ø	Ø	100	Ø	Ø	୬
CONT		Ø	16400	Ø	Ø	୧

## UNFUNDED ( 6.1-6.4 ) (\* in THOUSANDS)

	FY84	FY85	FY86	FY87	FYBB	FY89
IN-H	0	ହ	Ø	ହ	<b>ው</b>	Ø
	0	ହ	Ø	ହ	ማ	Ø

#### OPN FUNDING (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
TOTAL	Ø	ę.	ø	Ø	Ø	<b>୧</b> 1

MAN YEAR(s): | 0.0| | 0.0| | 0.0| | 0.0| | 0.0|

WORK UNIT SUM: | ++++++++++ | ++++++++

JOINT PROJECT: INFA!

DARPA Funding: | 0| | 0.0|

## ROBOTIC INFORMATION SYSTEM

14-MAR-85 15:31:59

MODULE: INPCHK

SERVICE: NAVY

MAN YEAR(s):

WORK UNIT SUM:

JOINT PROJECT:

DARPA Funding: |

INF I

REFERENCE KEY No: PROJECT N PROJECT N CLASSIFIC TASK Titl PERFORMIN PO ADDRES	Title: No: CATION: Le: NG ORG:	IN-85- 18  IATI I29  IAUTOMATED IPIF 86 IUC  INASC IWASHINGTON	) DC 20361		M	!
	FY84	FY85	FY86	FY87	FY88	FY89
6. 1	e	Ø	5700	ø	Ø	Ø
6.2	Ø	<b>Ø</b>	Ø	0	Ø	0
6. 3A	Ø	0	Ø	9	<b>@</b>	0
6.3P	Ø	127	Ø	Ø	Ø	. 0
6.4	Ø	0	6	Ø	6	6)
FYDF FUN	IDING C	5.1-F.4 J (	\$ in THOUS	ANDS)		
	FY84	FY85	FY86	FY87	FY88	FY89
IN-H	0	0	300	ø	Ø	ø
CONT	ē	ē	5400	Q	ē	ଡ
UNFU" DEI	C 6.1-6	5.4] (\$ in	THOUSANDS	)		
	FY84	FY85	FY86	FY87	FY88	FY89
IN-H	0	ø	æ	Ø	ø	ହ
CONT	0	Ø	Ø	Ø	0	ର
OPN FUND	PING (\$	in THOUSAN	DS)			
	FY84	FY85	FY86	FY87	FY88	FY89
TOTAL	Ø	ø	5700	Ø	Ø	Ø

1 0.01 1 0.01 1 1.01 1 0.01 1 0.01 1 0.01

**| \*\*\*\*\*\*\*\*\*\*\* | | \*\*\*\*\*\*** 

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#### ROBOTIC INFORMATION SYSTEM

14-MAR-85 15:38:22

MODULE: INPCHK

SERVICE: NAVY

TASK Tit	Title:   No:   CATION:   le:   NG ORG:		· · ·	OLISHER SY		† 1
FYDP FL	INDING C F	RDT&E ] (\$	in THOUSAN	DS)		
•	FY84	FY85	FY86	FY87	FY88	FYB9
6. 1	0	0	350	0	Ø	8
6. 🕃	Ø	0	Ø	Ø	0	0
6.3A	8	0	8	Ø	0	8
6. 3B	Ø	9	0	0	9	. 0
6. 4	. 😻	0	Ø	0	9.	80
FYDP FU	INDING C	6.1-6.4 J (	in THOUS	ANDS)		
	FY84	FY85	FY86	FY87	FY88	FY89
IN-H	Ø	8	20	ଜ	Ø	Q
CONT	õ	è	330	v.	ē.	อ
	_	.43 (\$ in		<u> </u>		_
(3.4, 0.45)				•		
	FY84	FY85	FY86	FY87	FY88	<b>-</b> 489
IN-H	0	8	ø	Ø	Ø	0
CONT	0	0	2	Ø	Ø	Ø
OPN FUN	DING (\$	in THOUSANI	)S)			
	FY84	FY85	FY86	FY87	FY88	FY89
TOTAL	0	0	350	Ą	Ø	0
MAN YEAR WORK UNI JOINT PR DARPA Fu	T SUM:   OJECT:	0.0!   0.0 ******* +++  Ø!   0			.ଫା ା ଫ.ଫା	

#### ROBOTIC INFORMATION SYSTEM

14-MAR-85 15:32:52

MODULE: INPCHK

SERVICE: NAVY

REFERENCE No: |N-85- 20|
KEY No: | 1| |50| | 0|
PROJECT Title: |REMOTE CONTROLLED FIRE FIGHTING PLATFORM
PROJECT No: | | |
CLASSIFICATION: |UC|
TASK Title: |
PERFORMING ORG: |NSWC

ISILVER SPRING MD 20910

FYDP FUNDING ( RDT&E ) (\* in THOUSANDS)

PO ADDRESS:

	FY84	FY85	F'Y86	FY87	FY88	FY89
6.1	0	Ø	0	0	Ø.	0
6.2	0	0	0	6	Ø	@
6.3A	0	0	<b>Ø</b>	0	Ø	Ø
6.3B	921	2100	0	Ø	Ø	. @
6.4	0	9	1200	13000	1100	Ø

FYDP FUNDING [ 6.1-6.4 ] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
IN-H	450	1550	300	୫୧୧	୫ଉଡ	0
CONT	471	550	300	12200	300	60

UNFUNDED [ 6.1-6.4 ] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
IN-H CONT	<b>0</b>	Ø Ø	Ø Ø	Ø Ø	& 0	0

OPN FUNDING (\* in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
TOTAL	Ø	0	0	Q	0	ନ

MAN YEAR(s): | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01

WORK UNIT SUM: 100586034 1 101 OCT 84 1

JOINT PROJECT: 1+++1

DARPA Funding: | \_ 1 0.01

<del>#\*</del>

## ROBOTIC INFORMATION SYSTEM

14-MAR-85 15:33:14

MODULE: INPCHK

SERVICE: NAVY

REFERENCE No: IN-85- 211
KEY No: I 31 [29] [33]
PROJECT Title: IROBOT ASSISTED SURFACE PREPARATION AND PAINT PROJECT No: IDNS-50005 | CLASSIFICATION: IUC!
TASK Title: FEASIBILITY AND PRELIMINARY DESIGN | PERFORMING ORG: INSSC | IWASHINGTON DC 20362

FYDP FUNDING ( RDT&E ) (\* in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
6.1	0	ø	Ø	Ø	Ø	0
6.2	Ø.	<b>@</b>	Ø	<b>Ø</b>	Ø	0
6.3A	325	0	0	2	Ø	0
6.3P	Ø	Ø	0	Ø	Ø	. 0
6.4	8	@	0	Ø	Ø	6

FYDP FUNDING [ 6.1-6.4 ] (\* in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
IN-H	212	Ø	Ø	0	Ø	ଡ
CONT	113	<b>Ø</b>	Ø		Ø	ଡ

UNFUNDED [ 6.1-6.4 ] (\$ in THOUSANDS)

	FY84	FY85	FY86	FYB7	FY88	FY89
IN-H	0	242	1200	•	0	Ø
CONT	0	0	0	0	Ø.	8)

OPN FUNDING (\* in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
TOTAL	0	0	Ø	9	Ø	ଡ

MAN YEAR(#): 1 0.01 | 0.01 | 0.01 | 0.01 | 0.01

WORK UNIT SUM: | \*\*\*\*\*\*\*\* | \*\*\*\*\*\*\*\*\*

JOINT PROJECT: 1+++1

DARPA Funding: | 0| | 0.0|

## ROBOTIC INFORMATION SYSTEM

14-MAR-85 15:33:37

MODULE: INFCHK

SERVICE: NAVY

REFERENCE KEY No: PROJECT T PROJECT N CLASSIFIC TASK Tit1 PERFORMIN PO ADDRES	itle: o: ATION: e: G ORG:	IUNDERSEA CO ISF 34-376 ICLI IRUMIC (REMO	I UNMANNE	ED MCM)	į	1
FYDP FUN	DING C	RDT&E ] (\$	in THOUSANI	)S)		
	FY84	FY85	FY86	FY87	FY88	FY89
6. 1	0	e e	0	Ø	20	0
6.2	200	250	200	560	@	0
6. 3A	0	Ø	S.	<b>2</b>	Ø	. 0
6. 3B	0	0	Ø	<b>@</b>	2	0
6.4	0	0	ଡ	Ø	æ	Ø
FYDP FUN	IDING C	6.1-6.4 J (	s in THOUS	ANDS)		
	FY84	FY85	FY86	FY87	FY88	FY89
asi 11	100	100	100	100	0	Ø
IN-H CONT	100 100	150	100	100	Ø	Ø
			TI 101 1001/70			
UNFUNDEI	) [ 6. 1	-6.4 J (\$ in	IHUUSHNUS	,		
	FY84	, FY85	FY86	FY87	FY88	FY89
IN-H		0	Ø	Ø	Ø	2
CONT	ě	ø	. 0	8	Ø	Ğ
OPN FUN	DING (	\$ in THOUSAN	DS)			
	FY84	FY85	FY86	FY87	FY88	FY89
TOTAL	Ø	Ø	Ø	Ø	Ø	Ø
MAN YEAR WORK UNI JOINT PR DARPA Fu	T SUM: DJECT:	1.0    1.  DN 788001  +++    0	0; , 1.0; ; ; 1 00 0.0;		.ଡା । ଡ.ଡା	

## ROBOTIC INFORMATION SYSTEM

14-MAR+85 15:34:00

MODULE: INPCHK

## SERVICE: NAVY

REFERENCE KEY No: PROJECT I PROJECT N CLASSIFIC TASK Tit! PERFORMIN PO ADDRES	fitle: ! No: ! CATION: ! Le: ! NG ORG: !	UCI	I BRADUATE SI	CHOOL MONT		i ! 93943	
PYDP PU	FY84	FY85	FY86	FY87	FY88	FY89	
	11104			, , _ ,		_	
6. 1	•	62	38	0	8	9	
6.2	Ø.	Ø.	9	8	0	9	
6. 3A	Q	0	0	0	0	8	
6.3B	Ø.	0	0	ହ ଅ	0 0	. ଡ	
6.4	Ø	Q	0	· ·	•	e.	
FYDP FU	NDING C	6. 1-6. 4 J (1	in THOUS	ANDS)			
	FY84	FY85	FY86	FY87	FY88	FY89	
IN-H	ø	68	38	Ø	0	Ø	
CONT	ã	0	Q	ō.	Ø	Ø	
-	D ( 6.1-6	5.4] (\$ in	THOUSANDS	<b>)</b>			
	FY84	FY85	FY86	FY87	FY88	FY89	
IN-H	0	9	•	0	Ø	Ø	
CONT	2	0	0	Ø	Ø.	Ø,	
OPN FUN	DING (\$	in THOUSANI	DS)	•			
	FY84	FY85	FY86	FY87	FY88	FY89	
TOTAL	0	Ø	e	6	Ø	8	
MAN YEAR WORK UNIT JOINT PRI DARPA Fut	T SUM: DJECT:	0.0    0.1  *********  +++    0			.ହା ା ତ.ହ	t	
****	****	***	****	****	***	***	****

# ROBOTIC INFORMATION SYSTEM

14-M9R-85 15:34:29

MODULE: INPCHK

SERVICE: NAVY

```
REFERENCE No:
                    1N-85- 241
1 1) 1501 | 01
   HEY NO!
   PROJECT Title:
PROJECT No:
                    IATRBORNE REMOTELY OPERATED DEVICE (ALOD)
                    168718CF18-134
   CLASSIFICATION: IUCI
   TASK Title:
                    IUC
  PERFORMING ORG: IMCDEC
  PO ADDRESS:
                    IINTEL DIV DEV CTR QUANTICO VA 22134
   FYDP FUNDING ( ROTLE ) ( in THOUSANDS)
             FYBA
                        FY85
                                   FY86
                                              FY87
                                                        FY88
                                                                   FY89
   6. 1
                           Ø
   6. 2
              200
                        236
                                    300
   6. 3A
                                              325
                0
                                                           0
                                                                      0
                                      0
   6.3B
                                                Ø
                                                           0
                           8
                                      0
                                                                      0
   6.4
                Ø
                          0
                                                                      Ø
                                      Ø.
  FYDD FUNDING [ 6.1-6.4 ] (* in THOUSANDS)
            FY84
                       FY85
                                  FY86
                                             FY87
                                                       FYBB
                                                                  FY89
  IN-H
             160
                        146
                                   300
  CONT
                                              325
              40
                                                          0
                         98
                                                          0
  UNFUNDED [ 6.1-6.4 ] ($ in THOUSANDS)
                                                                     2
           FY64
                      FY85
                                 FY86
                                            FY87
                                                       FY88
                                                                  FY89
  IN-H
  CONT
                                                                     6
 OPN FUNDING ($ in THOUSENDS)
           FY84
                      FY85
                                 FY86
                                           FY87
                                                      FY88
                                                                 FY89
 TOTAL
                                                                    Ø)
MAN YEAR (%);
                 1 1.01 1 1.01 1 0.01 1 0.01 1 0.01 1 0.01
WORK UNIT SUM:
                 | | 神神神神神神神神神神神 | | | 神神神神神神神神神神
JOINT PROJECT:
DARPA Fundings
                1 01 1 0.01
```

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#### ROBOTIC INFORMATION SYSTEM

14-MAR-85 15:34:58

MODULE: INPCHK

SERVICE: NAVY

REFERENCE No:	IN-85- 251				
KEY No:	1 31 151!	1 @1			
PROJECT Title:	IPOPOTIC SI	ENSOR			
PROJECT No:	162712CF12-	-134 I			
CLASSIFICATION	IUCI				
TASK Title:	1				
PERFORMING ORG	IMCDEC				- 1
PO ADDRESS:	INTEL DIV	DEV CTR	QUANTICO VA	22134	
FYDP FUNDING	RDT&E ] (\$	in THOUS	ANDS)		
-					
FY84	FY85	FY86	FY87	FY88	
6.1 9		0	ø	a	
6-1			<b>(2</b> )	<b>W</b> 1	

	FY84	FY85	FY86	FY87	FY88	FY89
6. 1	6	æ	e	ø	•	•
6.2	•	500	900	0	•	•
6. 3A	0	0	0	0	0	•
6. 3B	9	0	0	0	0	. 😮
6.4	8	•	•	0	0	•

FYDP FUNDING [ 6.1-6.4 ] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
IN-H	8	500	900	0	æ	
CONT	8	<b>(P)</b>	0	20	NS.	9

UNFUNDED [ 6.1-6.4 ] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
IN-H	0	0	<b>0</b>	<b>0</b>	Ø Ø	@ 27

OPN FUNDING (\* in THOUSANDS)

	~Y84	FY85	FY86	FY87	FY88	FY89
TOTAL	0	0	<b>2</b>	e.	Ø	P

MAN YEAR(x): | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01

WORK UNIT SUM: !\*\*\*\*\*\*\*\* !\*\*\*\*\*\*\*

JOINT PROJECT: 1+++1

DARPA Funding: | 01 | 0.01

## ROBOTIC INFORMATION SYSTEM

14-MAR-85 15:35:15

MODULE: INPCHK

SERVICE: NAVY

REFERENC KIY NO! PROJECT PROJECT CLASSIF! TASK TI: PERFORM! PO ADDRE	Title: No: CATION: le: NG ORG: SS:	1	134   DEV CTR	QUANTICO V	9   82134	3 1
	FY84	5Y85	FYB6	FY87	FYBB	FY89
6. 1 6. 2 6. 3A 6. 3B 6. 4	8 395 8 8 9	8 335 8 8 8	ଷ ଓଡ଼ ବ ପ ବ	ଡ 23ଡ ଡ ଡ ଡ	0 288 0 0	ଶ ବ ବ ୧ ୧ ୧
FYDP FU	NDING [	6.1-6.4 J (	s in THOUS	SANDS)		
	FY84	FY85	FY86	FY87	FY88	FY89
IN-H	395 0	33 <b>5</b> 0	3 <b>90</b> 0	230 0	888 W	<b>ଓ</b> ହ
UNFUNDE	D C 6.1-	<b>6.4</b> ] (* in	THOUSANDS	\$)		
	FY84	FY85	FY86	FY87	FY88	FY89
IN-H CONT	e e	<b>0</b>	ହ ହ	Ø Ø	© Ø	<b>छ</b> श
OPN FUN	DING (\$	in THOUSANI	08)			
,	FY84	FY <b>85</b>	FY86	FY87	FY88	FY99
TOTAL	<b>®</b> .	<b>Q</b>	Ø.	Ø	Ø	Ø
MAN YEAR WORK UNI JOINT PRO DARPA Fut	T SUM: DJECT:	1.5    1.5  ###########  MNA  		1. ወ. ወነ 1 4 •****	୬.ବା ୧୧.ବା	

## ROBOTIC INFORMATION SYSTEM

14-MAR-85 15:35:38

MODULE: INPCHK

SERVICE: NAVY

TASK TI	Title: No: ICATION: tle: ING ORG:	1	134		VA 22134	!
FYDP F	UNDING C	RDT&E ] (\$	in THOUS	ANDS)		
	FY84	FY85	FY86	FY87	FY88	FY89
6. 1 6. 2 6. 3A	490 490	9 426 9	410 8	8 735 8	9 359 9	81 80 81
6, 3R 6, 4	Ø	0 0	e e	9 9	Ø Ø	. Ø
ryde F		6.1-6.4 J (				
	FY34	FY85	FYAS	FY87	FYAA	FY89
IN-H CONT	480 10	426 Ø	410 Q	985 B	350 0	ହ ଜ
		-6.4 J (* in	_			
	FY84	FY85	FY86	'-Y87	FY88	FY89
IN-H	<b>e</b> 8	ହ ଜ	8	Ø Ø	Ø 4	<u>ହ</u>
OPN FUI	NDINB (	in THOUSAN	DS)			
	FY84	FY85	FY86	FY87	FY88	FY89
TOTAL	0	0	Ø	9	Ø	81
MAN YEAR WORK UN: JOINT PI DARPA F	IT SUM: ROJECT:	3.0    0.  ********  +++    0	_		રુ.જાા છ.	Ø1

## ROBOTIC INFORMATION SYSTEM

29-JAN-85 14:56:20

MODULE: INPCHK

## SERVICE: AIR FORCE

KEY No:		81 1291	1 01			
PROJECT		MATERIALS				
PROJECT I		23 <b>06</b> /A3	L			
CLASSIFI	CATION: 1					
TASK Tit		MANUFACTUR	ING SCIENC	ES		I.
	NG ORG: I					1
PC ADDRES	5 <b>5:</b>	BOLLING AF	B DC 8033	2-6448		
FYDP FU	NDING C F	DTRE J (\$	in THOUSAN	DS)		
	FY84	FY85	FY86	FY87	FYBB	FY89
6. 1	2300	2366	9000	2000	2000	2000
6.2	•	0	8	6	Ø.	•
6. 3A	0	0	6	8	e	•
6.3B	0	8	•	Ø	0	· •
6.4	•	•	8	<b>©</b>	•	•
FYDP FU	NDING C 6	6.1-6.4 J (	\$ in THOUS	ANDS)		
	FY84	FY85	FY86	FY87	FY88	FY89
IN-H	ø	357	500	750	1000	1000
CONT	2300	1943	1500	1250	1000	1000
UNFUNDE	D C 6.1-6	.4 J (\$ in	THOUSANDS	<b>:</b> )		
	FY84	FY85	FY86	FY87	FY88	FY89
IN-H	0	0	9	0	e	0
CONT	0	•	6	0	0	0
7.8 FUN	DING (*	in THOUSAN	os)			
	FY84	FY85	FY86	FY87	FY88	FY89
TOTAL		•	0	Ø	Ø	0
MAN YEAR WORK UNI JOINT PRI DARPA Fui	T SUM:   DJECT:	0.0    1. ******** +++  0	_	2.0    2  *****	.51   2.51	

## ROBOTIC INFORMATION SYSTEM

29-JAN-85 14:56:42

MODULE: INPCHK

SERVICE: AIR FORCE

PROJECT CLASSIFI TASK Tit	Title:   No:   CATION:   le:   NG ORG:	31 1291 AUTOMATED 24180129 UC1 INTEL'LIGEN AFWAL/MLTC WRIGHT-PAT	AIRFRAME A	OMATION		1
	-	DT&E ] (\$				
. , , , , ,	FY84			FY87	FY88	FY89
6. 1	ø	0	Ø	0	æ	0
6.2	1426	261	852		0	0
6. 3A	(ð	<b>@</b>	Ø.	0	0	. 0
6. 3B	0	, <b>@</b>	@	0	0	0
6.4	Q	Q	8	0	0	0
FYDP FU	ONIDING [ 6	.1-6.4 J (				-
	FY84	FY85	FY86	FY87	FY88	FY89
IN-H	Ø	ø	ø	9	ø	9
CONT	1426	-	852	1163	•	6
UNFUNDE	D [ 6.1-6	i.4 ] (\$ in	THOUSANDS	>		
	FY84	FY85	FY86	FY87	FY88	FY89
IN-H	9	ø	0	0	ø	0
CONT	0	700	@	•	0	8
. 7.8 FUN	IDING (*	in THOUSAN	DS)			
	FY84	FY85	FY86	FY87	FYBB	FY89
TOTAL	1540	128	1936	ଚ	ø	6

1F-85- 21

WORK UNIT SUM: [\*\*\*\*\*\*\*\* | | \*\*\*\*\*\*\*\*\*\*

REFERENCE No:

MAN YEAR (s):

JOINT PROJECT: 1+++1

DARPA Funding: | 3702| | 51.0|

<del>我你我我我我我我们,你我我们我我们我我们我们我们我们的我们的我们的我们的我们的我们的的的的的。"</del>

10.01 10.01 10.01 10.01 10.01 10.01

### ROBOTIC INFORMATION SYSTEM

29-JAN-85 14:57:06

MODULE: INPCHK

### SERVICE: AIR FORCE

REFERENCE KEY No: PROJECT TO PROJECT NO CLASSIFICE	itle:    c:	F-85- 3! 31 129! AUTOMATED 8 28658006	1371 PIRFRAME A !	SSEMBLY		
TASK Title	e:   3 DRG:	FLEXIBLE AS AFWAL/MLTC WRIGHT-PAT		BSYSTEMS		 
	•	DT&E ] (\$ :				
	FY84	FY85	FY86	FY87	FY88	FY89
6. 1	0	Ø	0	ø	0	0
6.2	0	0	0	0	0	0
6. 3A	0	0	0	0	0	Đ.
6. 3P	0	0	Ø	0	0	0
6. 4	0	@	0	0	0	. 6
FYDP FUNI	) ING [ 6	.1-6.4 ] (1 FY85	in THOUS	ANDS) FYB7	FY88	FY89
IN-H	Ø	Ø	0	ø	Ø	0
CONT	è	ě	ō	Õ	ē	ō
UNFUNDED	C 6. 1-6	.4 ] (\$ in	THOUSANDS	<b>)</b>		
	FY84	FY85	FY86	FY87	FY88	FY89
IN-H	0	ø	0	0	ø	0
CONT	0	0	0	0	0	0
7.3 FUND	ING (\$	in THOUSANI	)S)			
	FY84	FY85	FY86	FY87	FY88	FY89
TOTAL	169	635	323	66	8	0
MAN YEAR (S WORK UNIT JOINT PROJ DARPI, Fund	SUM: I	0.01   0.0 ******** +++1 @    4			.ଡା   ଡ.ଡା	

### ROBOTIC INFORMATION SYSTEM

29-JAN-85 14:57:29

MODULE: INPCHK

SERVICE: AIR FORCE

REFERENCE KEY No: PROJECT : PROJECT : CLASSIFIC	ritle:	F-85- 41 31 1291 AUTOMATED 6 28651002 UC1	1371 PIRFRAME A	SSEMBLY		
TASK Tit:		FLEXIBLE AS	SSEMBLY SU	BSYSTEMS		1
		AFWAL/MLTC				1
PO ADDRES	3S:	WRIGHT=PAT	TERSON OH	45433		
FYDP FU	NDING C R	DT&E ] (\$ :	in THOUSAN	DS)		
	FY84	FY85	FY86	FY87	FY88	FY89
6. 1	Ø	Ø	0	0	Ø	0
6.2	Ø	Ø	0	0	0	0
6. 3A	Ø	0	0	0	0	0
6. 3B	Ø	0	0	0	0	. 0
6.4	Ø	Q	0	6	0	0
FYDP FU	ADÍNG C E	.1-6.4 3 (1	in THOUS	ANDS)		
	FY84	FY85	FY86	FY87	FY88	FY89
IN-H	Ø	0	Ø	Ø	0	0
CONT	0	0	0	0	0	0
UNFUNDE	o c 6.1-6	.4] (\$ in	THOUSANDS	<b>&gt;</b>		
	FY84	FY85	FY86	FY87	FY88	FY89
IN-H	ø	0	Ø	0	ø	0
CONT	0	0	0	0	0	0
7.8 FUNI	DING (\$	in THOUSANI	os)			
	FY84	FY85	FY86	FY87	FY88	FY89
TOTAL	174	473	687	253	0	୍ଦ
MAN YEAR WORK UNIT JOINT PRO DARPA FUN	T SUM: I	********** +++!		0.0    0 ****	.01   0.01	

Page B-82.

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### ROBOTIC INFORMATION SYSTEM

29-JAN-85 14:58:03

MODULE: INPCHK

### SERVICE: AIR FORCE

KEY No: PROJECT PROJECT	Title:	61 1291 13UTOMATED 14587000	31  AIRFRAMS A 	SSEMBLY		
	le: NG ORG:	INTELLIGEN AFWAL/MLTC				) 1
PO ADDRE		WRIGHT-PAT		45433		
FYDP FU	NDING [ F	RDT&E ] (\$	in THOUSAN	DS)		
	FY84	FY85	FY86	FY87	FY88	FY89
6. 1	0	Ø	ହ	Ø	0	Ø
6.2	1516	1128	1548	500	0	Ø
6.3A	0	0	0	2	0	ଡ
6. 3B	0	0	0	0	0	. 0
6. 4	0	0	Ø	2	0	0
FYDP FU	NDING [ 6	5.1-6.4 ] (	s in THOUS	ANDS)		
	FY84	FY85	FY86	FY87	FY88	FY89
IN-H	ø	ø	0	0	0	0
CONT	1516	1128	1548	500	Ø	Ø
UNFUNDE	D [ 6.1-6	5.4 ] (\$ in	THOUSANDS	>		
	FY84	FY85	FY86	FY87	FY88	FY89
IN-H	0	ø	ø	Ø	Ø	ø
CONT	ø	Ø	ø	Ø	ø	ø
7.8 FUN	DING (\$	in THOUSAN	DS)			
	FY84	FY85	FY86	FY87	FY88	FY89
TOTAL	1568	2000	900	Ø	ø	0
MAN YEAR WORK UNI JOINT PRO DARPA Fun	T SUM:   DJECT:	0.01 1 0. ******** +++1 46921 1 5	***   *****	0.0    0 ****	.01   0.01	

REFERENCE No:

IF-85- 51

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#### ROBOTIC INFORMATION SYSTEM

29-JAN-85 14:58:26

MODULE: INPCHK

SERVICE: AIR FORCE

REFERENCE No: IF-85- 61
KEY No: I 21 1291 1371
PROJECT Title: !AUTOMATED AIRFRAME ASSEMBLY
PROJECT No: !45870001 | I
CLASSIFICATION: !UC!
TASK Title: | ROBOTIC MICROACTUATORS 11
PERFORMING ORG: | AFWAL/MLTC

### FYDP FUNDING [ RDT&E ] (\* in THOUSANDS)

PO ADDRESS:

•	FY84	FY85	FY86	FY87	FY88	FY89
6. 1	0	0	Ø	0	0	2
6.2	Ø	269	300	0	0	0
6. 3A	0	0	9	0	0	0
6. 3P	0	<b>@</b>	3	0	0	. 0
6. 4	0	0	Ø	0	0	0

IWRIGHT-PATTERSON DH 45433

### FYDP FUNDING [ 6.1-6.4 ] (\* in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
IN-H	Ø	0	9	ø	0	ø
CONT	Ø	269	300	6	0	Ø

### UNFUNDED [ 6.1-6.4 ] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
IN-H	0	0	0	0	0	0
CONT	0	0	@	ହ	0	0

### 7.8 FUNDING (\* in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89
TOTAL	. 0	0	0	0	Ø	Ø

MAN YEAR(s): | 0.0| | 0.0| | 0.0| | 0.0| | 0.0|

WORK UNIT SUM: |\*\*\*\*\*\*\* | |\*\*\*\*\*\*\*

JOINT PROJECT: 1+++1

DARPA Furning: | 5691 | 100.0|

### ROBOTIC INFORMATION SYSTEM

29-JAN-85 14:58:49

MODULE: INPCHK

1F-85- 71

REFERENCE No:

### SERVICE: AIR FORCE

KEY No: PROJECT PROJECT CLASSIFI TASK Tit	Title:   No:   CATION:   le:   NG ORG:	81 1291 AUTOMATED 2306/A3 UC1 COORD RESC AFWAL/MLTC WRIGHT-PAT	AIRFRAME A I H IN ROBOT	ICS & INTE	g MFG	1
FYDP FU	NDING C R	DT&E 3 (\$	in THOUSAN	DS)		
	FY84	FY85	FY86	FY87	FY88	F <b>Y89</b>
6. 1	1000	1000	0	Ø	0	6
6.2	Ø	0	0	0	0	0
6. 3A	0	0	0	0	0	0
6. 3B	Ø	0	0	0	0	. 0
6.4	0	. 0	0	Ø	0	9
FYDP FU	NDING [ 6	. 1-5. 4 3 (	\$ in THOUS	ANDS)		
	FY84	FY85	FY86	FY87	FY88	FY89
IN-H	Ø	0	Ø	Ø	0	0
CONT	1000	1000	0	0	0	8
UNFUNDE	D [ 6.1-6	.43 (\$ in	THOUSANDS	•		
	FY84	FY85	FY86	FY87	FY88	FY89
IN-H	æ	2	Ø	Ø	0	0
CONT	0	0	0	0	0	20
7.8 FUN	DING (\$	in THOUSAN	08)			
	FY84	FY85	FY86	FY87	FY88	FY89
TOTAL	0	0	Ø	0	Ø	0
MAN YEAR WORK UNI JUINT PR DARPA FU	T SUM: I	***** +++;	ଡ଼ା ! ଡ.ଡା **! !***** ଡ.ଡା	Ø.@    @ *****	.ଡା   ଡ.ଡା	

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### ROBOTIC INFORMATION SYSTEM

29-JAN-85 14:59:13

MODULE: INPCHK

### SERVICE: AIR FORCE

TASK Tit	Title: No: CATION: le: NG ORG:		ELLENCE IN		MFG AUTO I	
FYDP FU	NDING [ F	RDT&E ] (\$	in THOUSAN	08)		
	FY84	. FY85	FY86	FY87	FYSS	FY89
6. 1 6. 2	1 <b>000</b> 9	1989 8	<b>0</b>	<b>0</b>	<b>e</b> 0	8
6. 3A	Ö	ě	9	ě	ě	9
6. 3B	9	ø	ő	Ö	8	_
6. 4	8	0	9	8	8	. 0
D. T	•	•	•	•	•	v
FYDP FU	NDING C	6.1-6.4 J (	in THOUSE	ANDS)		
	FY84	FY85	FY86	FY87	FY88	FY89
IN-H	0	0	ø	0	ø	0
CONT	1000	1000	ě	à	õ	ě
			_	~	_	_
UNFUNDE	D C 6.1-6	5.4] (\$ in	THOUSANDS	)		
	FY84	FY85	FY86	FY87	FY88	FY89
IN-H	9	0	ø	. 0	Ø	8
CONT	ě	ě	Ž.	. 0	õ	ě
	DING (\$	in THOUSAN	DS)	•	•	Ū
	FY84	FY85	FY86	FY87	FY88	FY89
TOTAL	0	0	Ø	0	0	6
MAN YEAR WORK UNI JOINT PRI DARPA Fui	T SUM: I	0.0    0.1  ********  +++   0    (			.01 1 0.01	

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### ROBOTIC INFORMATION SYSTEM

29-JAN-85 14:59:40

MODULE: INPCHK

REFERENCE No:

KEY No:

IF-85- 91

1 51 1291 1371

### SERVICE: AIR FORCE

PROJECT PROJECT CLASSIFI		I AUTOMATED (I 45050000	AIRFRAME AS	SEMBLY		
TASK Tit PERFORMI PO ADDRE	NG ORG:	IEND POINT ( IAFWAL/MLTC !WRIGHT-PAT		FLEXIBLE	ROBOTS	1
	-	RDT&E ] (\$				
	FY84	FY85	FY86	FY87	FY88	FY89
6. 1	0	8	8	9	0	•
6. 2	376	63	0	0	0	8
6. 3A 6. 3B	9	<b>0</b>	0	0	8	9
6.4	9	9	0 0	8 8	0	. 0 0
FYDP FU	NDING C	5.1-6.4 ] (1	in THOUSE	MDS)		
	FY84	FY85	FY86	FY87	FY88	FY89
IN-H	_ 0	@	0	0	0	0
CONT	370	63	0	8	0	0
UNFUNDE	D [ 6. 1-	5.4 ] (\$ in	THOUSANDS			
	FY84	FY85	FY86	FY87	FY88	FY89
IN-H	•	•	•	8	0	0
CONT	9	• .	•	0	0	0
7.8 FUN	DING (\$	in THOUSANI	08)			
	FY84	FY85	FY86	FY87	FY88	FY89
TOTAL	0	•	Ø	0	0	0
MAN YEAR WORK UNI	T SUM:	0.0    0.6			.01   0.0	1
JOINT PR		+++			•	
DARPA Fu	ua 1 Jā I	433   100	. W I			
*****	*****	*****	****	****	****	*****

### ROPOTIC INFORMATION SYSTEM

29-JAN-85 15:00:03

MODULE: INPCHK

### SERVICE: AIR FORCE

REFERENCE KEY No: PROJECT ! PROJECT !	Title:   No:	F-85- 101 51 1291 AUTOMATED 6 30055036	0  Rirframe A	SSEMBLY		
TASK Tit	NG ORG: I	UCT KINEMATICAL AFWAL/MLTC WRIGHTPATT		ANT MANIPU 45433	LATORS	l I
FYDP FUI	NDING [ R	DT&E ] (\$ :	in THOUSAN	DS)		
	FY84	FY85	FY85	FY87	FY88	FY89
6. 1	185	185	30	8	0	
6.2	0	8	•	Ø	0	0
6. 3A	<b>@</b>	0	0	Ø	0	•
6, 3B	•	0	0	0	0	. \varTheta
6, 4	Ø.	0	8	0	0	0
FYDP FU	NDING C 6	.1-6.4 ) (1	in THOUS	ANDS)		
	FY84	FY85	FY86	FY87	FY88	FY89
IN-H	0	<b>Ø</b>	0	Ø	Ø	0
CONT	185	185	30	Ø	Ø	8
UNFUNDE	D [ 6.1-6	.4 3 (\$ in	THOUSANDS	<b>)</b>		
	FY84	FY85	FY86	FY87	FY88	FY89
IN-H	0		0	0	0	0
CONT	0	0	0	20	0	8
7.8 FUNI	DING (\$	in THOUSANI	)S)			
	FY84	FY85	FY86	FY87	FY88	FY89
TOTAL	. 0	0	<b>@</b>	9	0	6
MAN YEAR WORK UNIT JOINT PRO DARPA Fur	r sum: 1	@. @    @. @ ********** +++{ @    @		<del>-</del> :	.ଡା   ଡ.ଡା	

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### ROBOTIC INFORMATION SYSTEM

29-JAN-85 15:00:27

MODULE: INPCHK

### SERVICE: AIR FORCE

REFERENCI KEY No: PROJECT PROJECT CLASSIFI TASK Tit PERFORMII PO ADDRES	Title: No: CATION: le: NG ORG:	IENABLING TE	ECHNOLOGY			! !
FYDP FU	NDING (	RDT&E 3 (\$ :	n THOUSAN	DS)		
	FY84	FY85	FYBS	FY87	FY88	FY89
6. 1	8	0	8		•	•
6. 2	0	0	8	0	0	•
6. 3A	0	0	0	0	0	0
6. 3B 6. 4	9	0	0	0	0 2	. 0
D. 4	0	0	0	0	•	0
FYDP FU	NDING C	6.1-6.4 ] (1	in THOUS	ANDS)		
	FY84	FY85	FY86	FY87	FY88	FY89
IN-H	8	0	a	•	0	0
CONT	0	ò	ě	ē	Ö	ē
UNFUNDE	D C 6.1-	-6.4 ] (\$ in	THOUSANDS	•		
	FY84	FY85	FY86	FY87	FY88	FY89
IN-H		•	0	0	0	0
CONT	8	•	0	8	0	0
7.8 FUN	DING (1	in THOUSANI	)S)			
	FY84	FY85	FY86	FY87	FY88	FY89
TOTAL	1300	0	æ	•	0	•
MAN YEAR WORK UNI JOINT PRI DARPA Fui	T SUM:	0.1    0.1  ************************************	*		. <b>9</b> 1 1 <b>9.</b> 91	

<sup></sup>

### ROBOTIC INFORMATION SYSTEM

**28-79-68** 15:00:55

MODULE: INPCHK

### SERVICE: AIR FORCE

REFERENC KEY No: PROJECT PROJECT CLASSIFI TASK TIT PERFORMI PO ADDRE	Title: No: ICATION: :le: ING ORG:	F-85- 12    6   29    IMAGE PROCE  20680644  UC      IAFSC   IEGLIN AFB F	l	GUAGE		1 1
FYDP FL	INDING C	RDT&E ] (\$	in THOUSAN	DS)		
	FY84	FY85	FY86	FY87	FY88	FY89
6. 1	9		0	0	0	0
6. 2 6. 3A	48	144	200	86 Ø	9	0
6. 3B	Ø Ø	e Ø	0	9	Ø Ø	· 0
6.4		õ	ě	õ	ě	
FYDP FL	INDING C	6. 1-6. 4 J (1	in THOUS	ANDS)		
	FY84	FY85	FY86	FY87	FY88	FY39
IN-H	9	Ø	8	₹	0	0
CONT	48	144	200	86	e e	6
UNFUNDE	ED C 6. 1-	-6.4 J (\$ 1n	THOUSANDS	)		
	FY84	FY85	FY86	FY37	FY88	FY89
IM-H	•	0	<b>3</b>	Ø	0	0
CONT	3	0	9	0	0	•
7.8 FUN	) ENIC	in Thausani	)S)			
	FY84	FY85	FY86	FY87	FY88	FY89
TOTAL	•	0	8	0	0	6
MAN YEAR WORK UNI JOINT PR DARPA FU	T SUM:	1 0.31   0.3  *************  +++    1    50			.ବା ାଡ.ଡା	

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### ROBOTIC INFORMATION SYSTEM

29-JAN-45 15:01:18

MODULE: INPCHK

SERVICE: AIR FORCE

,	REFERENC KEY NO: PROJECT	1	F-85- 131 471 1291	1 01				
	PROJECT		F1962884C0	<b>2</b> 10 i				
	CLASSIFI		UC I	• •				
	TPSK Tit		BENERAL PU	RPOSE ROBO	TIC SYSTEM	1	ı	
	PENFORMI		AFSC				1	
	PO FYDRE	1881	ESD HANSCO	M AFB MA	01731			1
	FYDP FU	NDING C R	DT&E 3 (\$	in THOUSAN	DS)			
		FY84	FY85	FY86	FY87	FY88	FY89	- 4
	6.1	0	0	0	0	0	0	
	6.2	Ø	0	0	0	0	9	
	6. 3A	0	0	Ø	0	9	0	
	6. 3B	0	Ø	0	0	0	0	
	6.4	<b>0</b> .	0	8	0	0	0	
	FYDP FU	NDING C 6	.1-6.4 3 (	• in THOUS	ANDS)			
		FY84	FY85	FY86	FY87	FY88	FY89	
	IN-H	Ø	Ø	Ø	Ø	Ø	0	
	CONT	Ø	0	0	0	<b>0</b> ,	6	
	UNFUNDE	D C 6. 1-8	.4 ] (* in	THOUSANDS	)			
		FY84	FY85	FY86	FY87	FY88	FY89	
	IN-H	9	ø	Ø	Ø	Ø	Ø	
	CONT	8	· 0	0	Ø	Ø	Ø	
	7.8 FUN	DING (\$	in THOUSAN	DS)				
		FY84	FY85	FY86	FY87	FY88	FY89	
	TOTAL	145	62	ø	0	Ø	0	
	MAN YEAR HORK UNI JOINT PR	T SUM: I	0.0    0.0 *************			.01   0.01		
	DARPA Fu			0.01	•			

TAB B-1. Summary Printout: Army

and the second

20-MAR-85 12:19:43

MODULE: FNDSUM SERVICE: ARMY

KEY	WO	RD	(5	}	:
-----	----	----	----	---	---

1) 2) 3)

EVNC. E	UNDING [	RDT&E ) (\$	in THOUSA	ne\			
CIMP. C	GIADING L	UDIAC 3 (+	IN INCOME	1007			• i
	FY84	7 <b>785</b>	FY86	FY87	FY88	FY89	TOTAL
6.1	1932	2582	1963	1510	790	818	9593
6.2	8871	20646	12171	10680	9900	11515	73792
6. 3A	429	825	906	2045	5387	<b>5</b> 521	19107
6. 38	3 <b>50</b> a .	3793	4063	4034	5560	7382	28340
6.4	50	400	200	400	120	120	1290
TOTAL	14790	28244	19297	18678	21757	29356	132122
FIDE F	UNDING [ (	FY85	(\$ in THOUS	FY87	FY88	FY89	TOTAL
IN-H	5883	9342	10071	12477	15979	21889	75641
CONT	8987	18902	9226	6201	5778	7467	56481
TOTAL	14790	18244	19297	18678	<b>21757</b>	29356	132122
UNFUNDI	ED [ 6.1-	5.4 ] (\$ i)	THOUSANDS	\$)			
	FY84	FY85	FY86	FY87	FY88	FYB9	TOTAL.
IN-H	Ø	825	1990	1570	530	660	5575
CONT	Ø	1665	3980	4680	4330	4640	19295
TOTAL	Ø	2490	5970	6250	4860	2344	24870

20-MAR-85 12:20:37

MODULE: FNDSUM SERVICE: ARMY

KEYWORD(s):

1) MOBILITY/NAVIGATION 2)

3)

FYDP FU	I DNIDN	RDT&E ] (\$	in THOUSAN	(2a		<u>s</u>	
	FY84	FY85	FY86	FY87	FY88	FY89	TOTAL
6.1	827	1331	893	710	550	518	4829
6. 2	4703	11672	3076	775	600	700	21524
6.3A	205	125	200	425	1775	4725	7455
6.3B	3398	<b>3682</b>	2188	2	0	9	9268
6.4	Ø	Ø	Ø	0	Ø	Ü	S)
TOTAL	9133	16808	53 <b>57</b>	1910	2925	5943	4307E
FYDP FU	FY84	5.1-6.4 ] ( FY85	\$ in THOUS FY86	ANDS) FY87	FY88	FY89	TOTAL
IN-H	3043	4555	2312	867	1867	4807	17451
CONT	6090	12253	4045	1043	1058	1136	25625
TOTAL	9133	16828	6357	1910	2925	5943	43076
UNFUNDE	TD [ 6.1-6	5.4 ] (* in FY85	THOUSANDS	) FY87	FY88	FY89	TOTAL
IN-H	ø	100	820	70	70	30	1.090
CONT	Ø	1365	580	1530	1730	1070	6275
TOTAL	Ø	1465	1400	1600	1800	1100	7365

22-JAN-85 15:29:29

MODULE: FNDSUM SERVICE: ARMY

KEYWORD(s): 1) SENSOR	5)	3)
FYDP FUNDING	[ RDT&E ] (\$ in THOUSANDS)	

101110 - 11						
FY84	FY85	FY86	FY87	FY88	FY89	TOTAL
		_	•	•	•	550
		_	<del>-</del>	_	-	
580	425					6140
100	700	700	1500			8500
Ø	0	0	Ø	0	825	825
	0	0	0	0	0	Ø
1175	1180	1350	2225	4310	5775	16015
NDING C 6	6.1-6.4 ] (	\$ in THOUS	(SANDS			
FY84	FY85	FY86	FY87	FY88	FY89	TOTAL
480	425	525	1600	3810	5275	12115
					500	3900
1175	1180	1350	2225	4310	5775	16015
D [ 6.1-6	5.4 ] (\$ ir	THOUSANDS	6)			
FY84	FY85	FY86	FY87	FY88	FY89	TOTAL
Q	225	Ø	0	0	0	225
			0	0	0	2
				0	0	225
	FY84  495 580 100 0 1175  NDING [ 6 FY84  480 695 1175 D [ 6.1-6	FY84 FY85  495 55 580 425 100 700 0 0 1175 1180  NDING [ 6.1-6.4 ] ( FY84 FY85  480 425 695 755 1175 1180  D [ 6.1-6.4 ] (\$ in FY84 FY85	FY84 FY85 FY86  495 55 0 580 425 650 100 700 700 0 0 0 0 0 0 1175 1180 1350  NDING [ 6.1-6.4 ] (\$ in THOUS FY84 FY85 FY86  480 425 525 695 755 825 1175 1180 1350  D [ 6.1-6.4 ] (\$ in THOUSANDS FY84 FY85 FY86	FY84 FY85 FY86 FY87  495 55 0 0  580 425 650 725  100 760 700 1500  0 0 0 0  1175 1180 1350 2225  NDING [ 6.1-6.4 ] (\$ in THOUSANDS)  FY84 FY85 FY86 FY87  480 425 525 1600 695 755 825 625  1175 1180 1350 2225  D [ 6.1-6.4 ] (\$ in THOUSANDS)  FY84 FY85 FY86 FY87  20 225 0 0 0	FY84 FY85 FY86 FY87 FY88  495 55 0 0 0 580 425 650 725 1310 100 700 700 1500 3000 0 0 0 0 0 0 0 0 0 0 1175 1180 1350 2225 4310  NDING [ 6.1-6.4 ] (\$ in THOUSANDS)  FY84 FY85 FY86 FY87 FY88  480 425 525 1600 3810 695 755 825 625 500 1175 1180 1350 2225 4310  D [ 6.1-6.4 ] (\$ in THOUSANDS)  FY84 FY85 FY86 FY87 FY88  480 425 525 1600 3810 695 755 825 625 500 1175 1180 1350 2225 4310  D [ 6.1-6.4 ] (\$ in THOUSANDS)  FY84 FY85 FY86 FY87 FY88	FY84 FY85 FY86 FY87 FY88 FY89  495 55 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0

22-JAN-85 15:29:59

MODULE: FNDSUM SERVICE: ARMY

KEYWORD(s):
1) MANIPULATOR

2)

3)

EVDD	FUNDING	Г	PRTAE	٦	1 .	in	THOUSENDS
F 4110	HIMIDING		RUILE		(35	ואו	HUUSANDS)

	FY84	FY85	FY86	FY87	FYBB	FY89	TOTAL
6.1	142	91	100	Ø	Ø	<b>o</b> `	333
6.2	2688	6205	5549	6243	5825	6095	32605
6.3A	0	0	0	0	0	0	<b>Ø</b> 1
6.3B	0	Ø	0	Ø	2400	5557	7957
6.4	50	400	200	400	0	0	1050
TOTAL	2880	6696	5849	6643	8225	11652	41945
FYDP FU	FY84 1563	FY85 2090	<pre>\$ in THOUS FY86 3004</pre>	FY87 3523	FY88 5810	FY89 <del>9</del> 237	TOTAL 25227
CONT	1317	4606	2845	3120	2415	2415	16718
TOTAL	2880	6696	5849	6643	8225	11652	41945
UNFUNDE	D C 6.1-6	.43 (\$ in	THOUSANDS	<b>(</b> )			
	FY84	FY85	FY86	FY87	FYB8	FY89	TOTAL
IN-H	Ø	500	1000	1200	200	400	3300
CONT	0	300	1000	1200	600	1100	4200
TOTAL	0	800	2000	2400	800	1500	7500

22-JAN-85 15:30:31

MODULE: FNDSUM SERVICE: ARMY

KEYWORD (# ::

1) ARTIFICIAL INTEL 2)

3)

FYDP FU	NDING E R	DT&E ] (\$	in THOUSAN	DS)		<b>₽</b> ₹			
	FY84	FY85	FY86	FY87	FY88	FY89	TOTAL		
6.1 6.2 6.3A 6.3B 6.4 TOTAL	468 0 0 110 · 0 578	735 Ø Ø 111 Ø 846	600 290 3 275 0 1165	400 0 120 350 0 870	0 500 0 160 120 780	9 500 0 120 620	2203 1290 120 1006 240 4859		
FYDP FU	FYDP FUNDING [ 6.1-6.4 ] (* in THOUSANDS)								
	FY84	FY85	FY86	FY87	FY88	FY89	TOTAL		
IN-H CONT TOTAL	297 281 <b>5</b> 78	498 348 846	685 480 1165	523 347 870	367 413 780	260 360 620	2630 2229 48 <b>5</b> 9		
UNFUNDE	D C 6.1-6	.4] (\$ in	THOUSANDS	)					
	FY84	FY85	FY86	FY87	FY88	FY89	TOTAL		
IN-H CONT TOTAL	0	Ø Ø	120 2300 2420	250 1800 2050	200 1800 2000 -	180 2320 2500	750 8220 8970		

22-JAN-85 15:31:14

MODULE: FNDSUM SERVICE: ARMY

KEYWORD(s):

1) MAN/MACH INTERFACE 2)

3)

### FYDP FUNDING [ RDT&E ] (\$ in THOUSANDS)

	FY84	FY85	FYB6	FY87	FY88	FY89 _ ,	TOTAL
6.1	0	75	100	100	0	0	275
6.2	150	300	500	600	650	700	2900
6. 3A	9	0	0	0	0	0	21
6. 3B	0	Ø	0	Ø	0	0	2
6.4	0	Ø	Ø	0	0	0	21
TOTAL	150	375	600	700	650	700	3175
FYDP FL	JNDING C 6	5.1-6.4 ] (	\$ in THQUS	(SUNA			
	FY84	FY85	FY86	FY87	FY88	FY89	TOTAL
IN-H	<sup>.</sup> 75	225	310	360	300	300	1570
CONT	75	150	. 290	340	350	400	1605
TOTAL	150	375	600	700	650	700	3175
UNFUNDE	FD C 6.1-6	5.4] (\$ ir	THOUSANDS	3)			
	FY84	FY85	FY86	FY87	FY88	FY89	TOTAL
IN-H	0	Ø	Ø	0	Ø	. 0	<b>2</b> 1
CONT	0	ō	Ø	Ø	0	0	0
TOTAL	a	Ø	in the second	<b>(2)</b>	Ø	ρ.	ρ <sub>1</sub>

22-JAN-85 15:31:42

MODULE: FNDSUM SERVICE: ARMY

KEYWORD(s):		
1) CONTROL	2)	3)

FYDP FU	INDING C R	DT&E ] (\$	in THOUSAN	DS)		<u></u>	
	FY64	FY85	FY86	FY87	FY88	FY89 :	TOTAL
6. 1	8	293	270	300	240	300	1403
6.2	525	1601	1586	1776	395	400	6283
6.3A	124	0	0	0	612	22 <b>96</b>	3032
6.3B	Ø	Ø	1600	3684	3000	1000	9284
6.4	2	0	Ø	0	Ø	0	20
TOTAL	649	1894	3456	5760	4247	3996	20002
FYDP FU	FY84	.1-6.4 ] ( FY85	FY86	FY87	FY88	FY89	TOTAL
IN-H	325	1349	3035	5404	3625	1810	15548
CONT	324	545	421	356	622	2186	4454
TOTAL	649	1894	3456	5760	4247	3996	20003
UNFUNDE	ED C 6.1-6	.4] (\$ in	THOUSANDS	<b>:</b>			
	FY84	FY85	FY86	FY87	FY88	FY89	TOTAL
IN-H	0	0	50	50	60	50	210
CONT	0	•	100	150	200	150	ଡେଡ
TOTAL	Ø	0	150	200	260	500	818

22-JAN-85 15:32:15

MODULE: FNDSUM SERVICE: ARMY

KEYWORD (s) :

1) MATERIALS HANDLING 2)

FYDP FUNDING [ RDT&E ] (\$ in THOUSANDS)

3)

							<b>.</b> •
	FY84	FY85	FY86	FY87	FY88	FY89	TOTAL
6. 1	320	945	778	800	240	300	3383
6. 2	3493	7306	7434	8243	7585	9045	43106
6. 3A	224	200	200	120	0	0	744
6. 3B	0	0	1600	3884	5560	7382	18426
6.4	0	0	0	0	120	120	240
TOTAL	. 4037	8451	10012	13047	13505	16847	65899
FYDP FL	INDING C 6	. 1-6.4 ]	(\$ in THOU	SANDS)			
	FY84	FY85	FY86	FY87	FY88	FY89	TOTAL
IN-H	2270	3786	6414	9485	10227	13542	45724
CONT	1767	4665	3598	3562	3278	3305	20175
TOTAL	4037	8451	10012	13047	1 3505	16847	65899
UNFUNDE	D [ 6.1-6	.43 (\$ in	THOUSAND	5)			
	FY84	FY85	FY86	FY87	FY88	FY89	TOTAL
IN-H	0	725	1170	1500	460	630	4485
CONT	Ø	300	2 <b>500</b>	3150	2600	3570	12120
TOTAL	Ø	1025	3670	4650	3060	4200	16605

22-JAN-85 15:32:49

MODULE: FNDSUM SERVICE: ARMY

KEYWORD(s):
1) INDUSTRIAL APPL 2)

192**4**2.

3)

FYDP FUNDING [ RDT&E ] (\$ in THOUSANDS)		ě	
FY84 FY85 FY86 FY87	FY88	FY89	TOTAL
6.1 96 94 42 0	0	. · · ·	232
6.2 0 0 0	0	0	Ø
6.3A 0 0 0 0	Ø	0	0
6.3B 110 111 275 150	9	0	646
6.4 0 200 0 400	0	0	680
TOTAL 206 405 317 550	Ø	8	1478
FY84 FY85 FY86 FY87	FY88	FY89	TOTAL
TN 11 40 C4 TP F0	_	•	000
IN-H 40 61 75 50 CONT 166 344 242 500	Ø Ø	Ø Ø	226
	0	Ø	1252
TOTAL 206 405 317 550	Ø	v	1478
UNFUNDED [ 6.1-6.4 ] (\$ in THOUSANDS)			
FY84 FY85 FY86 FY87	FY88	FY89	TOTAL
IN-H 0 0 0	Ø	0	Ø
CONT 0 0 900 0	0	0	900
TOTAL 0 0 900 0	0	. 0	900

### ROBOTIC INFORMATION SYSTEM

22-JAN-85 15:33:18

MODULE: FNDSUM SERVICE: ARMY

KEYWORD(s):
1) MEDICAL

2)

3)

### FYDP FUNDING [ RDT&E ] (\* in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY	TOTAL
6. 1	495	0	0	0	0	•	491
6. 2	0	<u> </u>	ě	ø	ø	ě	
6. 3A	0	500	500	500	500	500	2506
6. 3B	0	0	0	0	0	0	
6. 4	0	0	0	2	0	9	é
ቸው ጊ	495	500	590	500	500	500	299:
FY FU IN-H CONT	NDING [ 6 FY84 Ø 495	.1-6.4 ] ( FY85 0 500	\$ in THOUS FY86 0 500	FY87 Ø 500	FY88 Ø 500	FY89 0 506	10TAI ; 2 <b>99</b> 5
TOTE!	495	500	500	500	500	500	2991
UNFUNDE	D [ 6.1-6 FY84	.4] (\$ ir	THOUSANDS		FY88	FY89	TOTAL
	FIGT	F 100	F 1 96	F167	F 100	F 105	IUIM
IN-H CONT TOTAL	8 9	Ø Ø	0 0	Ø Ø	0 0	0 0 0	( (

20-MAR-65 12:33:52

MODULE: FNDSUM SERVICE: ARMY

3)

KEYWORD(#):			
1) AUTONOMOUS (	VEHICLE	2)	

FYDP	FUNDING	נ	RDT&E	3	(\$	in	THOUSANDS)

•	FY84	FY85	FYB6	FYB7	FYBB	FY <b>89</b>	TOTAL
6.1	827	1331	893	710	550	518	4629
6.2	5053	12230	3451	1155	995 .	1100	23984
6.3A	205	125	200	1425	4275	6725	12955
6. 3B	3398	3682	2188	Ø	۵	0	9268
6.4	(Ø	Ø	8	Ø	0	Ø	<b>©</b> 1
TOTAL	9483	17368	6732	3290	5820	8343	51036
FYDP FU	NDING C	6.1~6.4 J (	* in THOUS	ANDS)			
	FY84	FY85	FYB6	FY87	FYBB	FY <b>89</b>	TOTAL
IN-H	3343	4915	2632	2192	4702	7147	24531
CONT	6140	12453	4100	1098	1118	1196	26105
TOTAL	9483	17368	6732	3590	2850	8343	5103E
UNFUNDE	D [ 6.1-	5.4 ] (* ir	THOUSANDS	•			, 1
	FY84	FY85	FY36	FY87	FY88	FY89	TOTAL
IN-H	0	100	820	70	70	ØE	1098
CONT	Ø	1365	580	1530	1730	1070	6275
TOTAL	<b>Ø</b>	1465	1400	1600	1800	1100	7365

20-MAR-85 12:33:07

MODULE: FNDSUM SERVICE: ARMY

KEYWORD(s):
1) BATTLEFIELD SYS

(3)

3)

EVDE	FUNDING	r	RDTAF	٦	( <b>4</b> s.	124	THOUSANDS)
CIUP	LONDING		KDIGE		(4)	7 1	INUUSHNUSI

•	FY84	FY85	FY86	FY87	FY88	FY89	TOTAL
6. 1	910	610	350	300	ø	Ø	2170
6. 2	4778	11850	2801	471	0	Ø	19900
6.3A	205	625	700	1725	3837	5021	12113
6. 3B	Ø	Ø	Ø	2	Ø	Ø	Ø
6.4	49	ð	Ø	Ö	Ø	0	80
TOTAL	5893	13085	3851	2496	3837	5021	34183
FYDF FUN	DING C 6	.1-6.4 ] (	\$ in THOUS	ANDS)			
	FY84	FY85	FY86	FY87	FY88	FY89	TOTAL
IN-H	447	1220	1185	1425	2650	2300	9227
CONT	5446	11865	2666	1071	1187	2721	24956
TOTAL	5893	13085	3851	2496	3837	5021	34183
UNFUNDED	C <b>6.1</b> -6	.4] (\$ in	THOUSANDS	•			
	FY84	FY85	FY86	FY87	FY88	FY89	TOTAL
IN-H	0	0	20	70	70	30	190
CONT	Ø	0	490	1530	1730	1070	4820
TOTAL	0	Ø	510	1600	1800	1100	5010

28-JAN-85 16:32:59

MODULE: FNDSUM SERVICE: ARMY

KEYWORD(s):

1) TELEOPERATED SYS 2)

3)

FYDD	FUNDING	Г	RDTAF	1	14	in	THOUSANDS)
TUP	LOIADTIAG	L	RUIGE	_	(3)	I FI	IUUUSHNUSI

	FY84	FY85	FY86	FY87	FY88	FY89	TOTAL
6.1	Ø	ø	0	0	Ø	0	* 0
6.2	25	325	475	525	700	700	2750
6.3A	Ø	0	Ø	0	0	0	Ø
6.3B	Ø	Ø	ø	ō	Ö	ě	õ
6.4	50	200	200	Ö	ø	ē	450
TOTAL	75	525	675	525	700	700	3200
FYDP FU	NDING ( E	5.1-6.4 3 (	\$ in THOUS	ANDS)			
	FY84	FY85	FY86	FY87	FYBB	FY89	TOTAL
IN-H	25	250	475	525	700	700	2675
CONT	50	275	200	Ø	Ø	Ø	525
TOTAL	75	525	675	525	700	700	3200
UNFUNDE	0 ( 6.1-6	.4] (* in	THOUSANDS	<b>)</b>			
	FY84	FY85	FY86	FY87	FY88	FY89	TOTAL
- IN-H	ø	0	Ø	Ø	Ø	Ø	Ø
CONT	0	0	Ø	Ø	Ø	0	Ø
TOTAL	0	9	Ø	Ø	Ø	ø	<b>2</b> )

22-JAN-85 15:34:39

MODULE: FNDSUM SERVICE: ARMY

KEYWORD(s): 1) TARGET ID		
17 INUGEL ID	2)	3)

PYUP	FUNDING	C	RDT&E	3	(\$	in	THOUSANDS
------	---------	---	-------	---	-----	----	-----------

	FY84	FY85	FY86	FY87	FY88	FY89	TOTAL
6. 1	194	210	260				• ;
6, 2	0		52 <b>0</b>	Ø	0	a	654
6. 3A	Ö	-	Ø	Ø	2	ø	
6. 3B	<del>-</del>	0	Ø	Ø	ě		Ø
6.4	Ø	Ø	Ø	Ø	ŏ	٥	Ø.
		Ø	Ø	Ø		Ø	Ø
TOTAL	194	210	250	ø	0	Ø	(Z)
	·			•	0	Ø	654
FYDP FUN	FY84	1-6.4 ] FY85	(\$ in THOUSA FY86	NDS) FY87	FY88	571 A 40 mm	
TAL LI					F 100	FY89	TOTAL
IN-H	80	80	250	Ø			
CONT	114	130	2		Ø	9	410
TOTAL	194	210	250	ø	Ø	Ø	244
			236	Ø	Ø	0	654
UNFUNDED	[ 6, 1-6,	4 ] (\$ in	THOUSANDS)			_	DJ4
	FY84	FY85	FY86	FY87	EVAA	<b>-</b>	
<b>V</b>					FY88	FY89	TOTAL
IN-H	8	Ø	Ø	•	_	•	
CONT	0	<b>Ø</b>	ö	Ø	0	Ø	Ø
TOTAL	Δ.	~	e e	Ø	<b>Ø</b>	i <b>X</b>	

22-JAN-85 15:35:13

MODULE: FNDSUM SERVICE: ARMY

KEYWORD(%):

1) TECH MANAGEMENT

2)

3)

FYDP FL	JNDING C R	DT&E ) (\$	in THOUSAN	IDS)		• 4	
	FY84	FY85	FY86	FY87	FY88	FYB9 <sup>†</sup>	TOTAL
6. 1	0	0	8	0	•	٥	
6.2	225	445	520	570	620	670	3050
6.3A	0	Ø	2	<b>3</b>	0	<b>Ø</b>	<b>(2)</b>
6.3B	Ø	8	0	0	9	Ø	Ø
6.4	Ò	0	0	0	0	Ø	Ø
TOTAL	225	445	520	570	620	670	3050
	FY84	FY85	FY86	FY87	FY88	FY89	TOTAL
T. 1.1	100	200	200	200	200	200	
IN-H CONT	125	24 <b>5</b>	320	370	42 <b>0</b>	470	1100 1950
TOTAL	552	445	52Ø	57Ø	620	670	3050
	ED C 6.1-6		THOUSANDS				
	FY84	FY85	FY86	FY87	FY88	FY89	TOTAL
IN-H	Ø	Ø	Ø	Ø	ø	Ø	Ø
CONT	0	Ø	Ø	Ø	Ø	. 0	0
TOTAL	i)	Į.	רלו	ולו	Ø.	Ó	Ø

22-JAN-85 15:41:02

MODULE: FNDSUM SERVICE: ARMY

KEYWORD (s):

1)

2)

ίΣ

### PERFORMING ORGANIZATION: TROSCOM

### FYDP FUNDING [ RDT&E ] (\$ in THOUSANDS)

							• ;
	FY84	FY85	FY86	FY87	FY88	FY89	TOTAL
6. 1	412	721	543	410	550	518	3154
6.2	453	2136	2140	2143	1230	2580	10682
6.3A	8	8	0	200	1550	4500	6250
6. 3B	8	Ø	1600	3684	5400	7382	18066
6. 4	0	0	Ø	0	Ø	0	2
TOTAL	865	2657	4283	6437	8730	14980	38152
FYDP FL	NDING [ 6	.1-6.4 ] (	\$ in THOUS	(SANDS			
	FY84	FY85	FY86	FY87	FY88	FY89	TOTAL
IN-H	391	1573	3261	5719	7777	13889	32610
CONT	474	1284	1022	718	953	1091	5542
TOTAL	865	2857	4283	6437	8730	14980	38152
UNFUNDE	D [ 6.1-6	.4 ] (\$ in	THOUSANDS	;)			
•	FY84	FY85	FY86	FY87	FY88	FY89	TOTAL
IN-H	0	0	Ø	Ø	200	400	କଥର
CONT	<b>Ø</b>	465	90	Ø	ହେଉ	1100	2255
TOTAL	0	465	90	0	800	1500	2855

22-JAN-85 15:41:54

MODULE: FNDSUM SERVICE: ARMY

KEYWORD(s):

1)

2)

3)

PERFORMING ORGANIZATION: AVSCOM

FYDP FUNDING [ RDT&E ] (\$ ir. THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89	TOTAL
6. 1	ø	Ø	Ø	Ø	0	Ø	Ø
6.2	0	0	Ø	230	310	520	1060
6.3A	Ø	Ø	Ø	0	0	0	<b>2</b> 1
6.3B	Ø	Ø	Ø	Ø	Ø	Ø	Ø
6.4	Ø.	Ø	Ø)	0	0	Ø	Ø
TOTAL	Ø	Ø	Ø	230	310	520	1060
FYDP FL	INDING [ 6	.1-6.4 ] (	\$ in THOUS	ANDS)			
	EVAA	EVAS	EVAG	EVAT	EVAA	EVAG	TOTAL

	FY84	FY85	FY86	FY87	FY88	FY89	TOTAL
IN-H CONT TOTAL	Ø Ø	Ø Ø Ø	Ø Ø Ø	50 180 230	60 250 310	70 450 520	180 880 1060

UNFUNDED [ 6.1-6.4 ] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89	TOTAL
IN-H CONT TOTAL	Ø Ø	Ø Ø Ø	Ø Ø	Ø Ø	Ø Ø	Ø Ø Ø	න ම ම

28-JAN-85 15:42:25

MODULE: FNDSUM SERVICE: ARMY

KEYWORD (s):

TOTAL

2)

3)

1800

PERFORMING ORGANIZATION: TACOM

FYDP FUNDING [ RDT&E ] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89	TOTAL
6. 1	<b>ø</b> .	. 0	Ø	0	Ø	0	121
6.2	30	700	700	0	Ũ	0	1430
6. 3A	0	Ø	Ø	0	Ø	0	Ø
6. 3B	3398	3682	2188	0	Ø	Ø	9268
6. 4	<b>&amp;</b>	Ø	Ø	<b>(2</b> )	Ø	Ø	K)
TOTAL	3428	4382	2888	Ø	Ø	Ø	10698
FYDP FU	NDING [ 6	.1-6.4 ] (	\$ in THOUS	(BANDS			
	FY84	FY85	FY86	FY87	FY88	FY89	TOTAL
IN-H	2380	3398	1115	Ø	Ø	Ø	6893
CONT	1048	984	1773	Ø	Ø	Ø	3805
TOTAL	3428	4382	2883	Ø	Ø	Ø	10698
UNFUNDE	D C 6.1-6	.4 ] (* ir	THOUSANDS	3)			
	FY84	FY85	FY86	FY87	FY88	FY89	TOTAL
IN-H	Ø	100	800	Ø	Ø	Ø	900
CONT	<b>1</b> 21	. <b>9</b> 00	<b>2</b> 1	<b>2</b> 1	Z)	<b>2</b> 1	9ଉଡ

800

NUMBER OF PROJECT FOUND =

1000

22-JAN-85 15:42:52

MODULE: FNDSUM SERVICE: ARMY

. KEYWORD (s):

1)

2)

3)

### PERFORMING ORGANIZATION: AMMRC

### FYDP FUNDING [ RDT&E ] (\$ in THOUSANDS)

	FY84	FY8 <b>5</b>	FY86	FY87	FY88	FY89	TOTAL
6. 1	0	55	Ø	Ø	`@	Ø	55
6. 2	0	20	Ø	2	Ø	Ø	Ø
6. 3A	124	8	0	Ø	0	Ø	124
6. 3B	110	111	275	150	Ø	Ø	646
6. 4	Ø	Ø	Ø	Ø	0	0	<b>(2)</b>
TOTAL	234	166	275	150	Ø	Ø	825
FYDP FUN	IDING C 6	FY85	\$ in THOUS	FY87	FY88	FY89	TOTAL
IN-H	40	61	75	50	Ø	Ø	226
CONT	194	105	200	100	<b>Ø</b> .	Ø	599
TOTAL	234	166	275	150	Ø	Ø	825
UNFUNDE	) [ 6.1-6	5.4 ] (\$ ir	THOUSANDS	<b>;</b> )			
	FY84	FY85	FY86	FY87	FY88	FY89	TOTAL
IN-H	0	Ø	Ø	Ø	Ø	Ø	<b>(2</b> )
CONT	Ø	Ø	900	Ø	Ø	Ø	9ଉଡ
TOTAL	<b>Ø</b>	Ø	900	20	Ø	Ø	900

22-JAN-85 15:43:48

MODULE: FNDSUM SERVICE: ARMY

KEYWORD(s):

1)

2)

3)

### PERFORMING ORGANIZATION: ERADCOM

### FYDP FUNDING [ RDT&E ] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89	TOTAL
6.1	415	410	Ø	Ø	Ø	Ø	858
6.2	345	400	401	196	Ø	Ø	1342
6.3A	0	Ø	0	1000	3112	4296	8498
6.3B	Ø	Ø	0	Ø	0	Ø	2
6.4	Ø	Ø	0	0	0	Ø	Ø
TOTAL	760	810	401	1196	3112	4296	10575
FYDP FUN	NDING ( 6	5.1-6.4 ] ( FY85	\$ in THOUS	ANDS) FY87	FY88	FY89	TOTAL
IN-H	47	70	35	1025	2650	2300	6127
CONT	713	740	366	171	462	1996	4448
TOTAL	76Ø	810	401	1196	3112	4296	10575
UNFUNDEI	C 6.1-6	5.4 ] (\$ in	THOUSANDS	3)			
	FY84	FY85	FY86	FY87	FY88	FY89	TOTAL
IN-H	Ø	Ø	20	70	70	30	198
CONT	Ø	Ø	490	1530	1730	1070	4820
TOTAL	Ø	20	510	1600	1800	1100	5010

22-JAN-85 15:44:19

MODULE: FNDSUM SERVICE: ARMY

KEYWORD(s):

1)

TOTAL

2)

3)

PERFORMING ORGANIZATION: CECOM

FYDP FUNDING [ RDT&E ] (\$ in THOUSANDS)

•	FY84	FY85	FY86	FY87	FY88	FY89	TOTAL
6. 1	. 0	Ø	Ø	Ø	0	Ø	Ø
6.2	Ø	Ø	2	Ø	Ø	0	Ø
6.3A	0	Ø	Ø	Ø	0	0	Ø
6. 3B	0	Ø	Ø	Ø	0	Ø	Ø
6. 4	Ø	200	Ø	400	0	0	600
TOTAL	0	200	Ø	400	Ø	Ø	600
FYDP FU	NDING C 6	.1-6.4 ] (	\$ in THOUS	ANDS)			
	FY84	FY85	FY86	FY87	FYBB	FY89	TOTAL
IN-H	0	Ø	Ø	Ø	0	Ø	Ø
CONT	Ø	200	Ø	400	0	2	ହେଉ
TOTAL	0	200	Ø	400	0	0	602
UNFUNDE	D [ 6.1-6	.4 ] (\$ ir	THOUSANDS	3)			
	FY84	FY85	FY86	FY87	FY88 .	FY89	TOTAL
IN-H	0	ت	Ø	Ø	0	Ø	Ø
CONT	0	Ø	0	Ø	0	Ø	Ø

22-JAN-85 15:44:48

MODULE: FNDSUM SERVICE: ARMY

KEYWORD (s):

1)

2)

3)

PERFORMING ORGANIZATION: MICOM

CVDD	PUNDING	r	DDT#E	٦.	/ œ	· ~	THOUSANDS)
EVNO			WIII 8.5		1 3	מיוו	I BUR ISBRUDS /

			5110 <i>c</i>	CV07	FY88	FY89	TOTAL
	FY84	FY85	FY86	FY87	F 100	FTOJ	101AC
6. 1	Ø	200	350	300	0	0	850
6.2	Ž	Ø	ø	Ø	. 🗷	0	20
6. 3A	ø	Ø	Ø	Ø	Ø	0	ହ
6. 3B	ø	Ø	ø	Ø	Ø	Ø	Ø
6.4	õ	ō	Ø	Ø	Ø	· Ø	න
TOTAL	ē	200	350	300	Ø	Ø	850
FYDP FL	NDING C E	.1-6.4 ] (		ANDS)			
	JNDING [ 6 FY84	.1-6.4 ] ( FY85		ANDS) FYB7	FY88	FY89	TOTAL
FYDP FL	FY84	FY85	\$ in THOUS		FY88 Ø	FY89 0	500
			\$ in THOUS	FY87			

### UNFUNDED [ 6.1-6.4 ] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89	TOTAL
IN-H CONT TOTAL	Ø Ø	Ø Ø Ø	Ø Ø	Ø Ø Ø	Ø Ø	Ø Ø Ø	ହ <b>ଡ</b>

### ROBOTIC INFORMATION SYSTEM

22-JAN-85 15:45:18

MODULE: FNDSUM SERVICE: ARMY

KEYWORD(s):

1)

2)

3)

PERFORMING ORGANIZATION: ARO

FYDP FUNDING [ RDT&E ] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89	- TOTAL
6. 1	142	91	100	0	Ø	0	333
6. 2	Ø	Ø	0	Ø	0	0	Ø
6. 3A	0	Ø	0	0	8	0	91
6.38	Ø	Ø	Ø	Ø	Ø	0	ø
6.4	0	0	Ø	Ø	0	2	Ö
TOTAL	142	91	100	0	Ø	0	333
FYDP FL	INDING C 6	.1-6.4 ) (	\$ in THOUS	ANDS)			4
	FY84	FY85	FY86	FY87	FYBB	FY89	TOTAL

	FY84	FY85	FY86	FY87	FY88	FY89	TOTAL
IN-H	0	Ø	Ø	ø	Ø	0	0
CONT	142	91	100	Ø	0	Ø	333
TOTAL	142	91	100	0	0	0	333

UNFUNDED [ 6.1-6.4 ] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89	TOTAL
IN-H	0	0	0	0	Ø	0	0
CONT	0	0	Ø ·	0	Ø	3	<b>Ø</b>
TOTAL	0	0	Ø	Ø	Ø	0	<b>(2</b> )

22-JAN-85 15:45:51

MODULE: FNDSUM SERVICE: ARMY

KEYWORD (s):

1)

2)

3)

PERFORMING ORGANIZATION: AMCCOM

	FY84	FY85	FY86	FY87	FY88	FY89	TOTAL
6.1	46B	943	970	800	240	300	3721
6.2	3013	3865	4295	4700	4940	4645	25458
6.3A	0	Ø	Ø	Ø	0	0	<b>Ø</b> 1
6. 3B	Ø	Ø	Ø	Ø	0	Ø	Ø
6.4	Ø	Ø	Ø	Ø	0	<b>2</b>	<b>2</b> 1
TOTAL	3481	4808	5265	5500	5180	4945	29179
FYDP FUN	DING C 6.1	-6.4 ] (\$	in THOUSAN	ກຣາ			
	FY84	FY85	FY86	FY87	FYBB	FY89	TOTAL
IN-H	2095	2605	3355	3515	3155	3400	18125
CONT	1386	2203	1910	1985	2025	1545	11054
TOTAL	3481	4808	5265	5500	5180	4545	29179
UNFUNDED	C 6. 1-6. 4	] (# in T	(2ØNA2UOH	•			
	FY84	/ Y8*	FY86	FY87	FY88	FY89	TOTAL
IN-H	0	500	1170	1500	260	230	3660
CONT	Ø	300	2500	3150	2000	2470	10420
TOTAL	0	800	3670	4650	2260	2700	14080

22-JAN-85 15:46:22

MODULE: FNDSUM SERVICE: ARMY

KEYWORD(s):

1)

2)

3)

PERFORMING ORGANIZATION: HEL

FYDP FUNDING [ RDT&E ] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY <b>69</b>	TOTAL
6. 1	0	160	Ø	0	0	0	.160
6.2	1080	3595	3435	3420	3420	3770	18720
6. 3A	100	200	200	120	0	0	620
6.3B	0	Ø	0	200	160	Ø	360
6.4	50	200	200	28	120	120	ନ୍ତେଉ
TOTAL	1230	4155	3835	3740	3700	3890	20550
FYDP FU	NDING [ 6	.1-6.4 ] (	\$ in THOUS	ANDS)			
	FY84	FY85	FY86	FY87	FY88	FY89	TOTAL
IN-H	680	1185	1630	1918	2337	2230	୨୭୫୬
CONT	550	2970	22 <b>05</b>	1822	1363	1660	10570
TOTAL	1230	4155	3835	3740	3700	3890	20552
UNFUNDE	D C 6.1-6	.4] (\$ in	THOUSANDS	)			•
	FY84	FY85	FY86	FY87	FY88	FY89	TOTAL
IN-H	0	225	0	Ø	0	0	225
CONT	Ø	Ø	0	0	Ø	Ø	Ø
TOTAL	0	225	0	Ø	0	Ø	225

TAB B-2. Summary Printout: Mavy

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MODULE: FNDSUM SERVICE: NAVY

KEYWORD (s):

1)

2)

3)

FYDP FU	INDING C A	DT&E ] (\$	in THOUSA	NDS)		• 1	
	FY84	FY85	FY86	FY87	FY88	FY89	TOTAL
6. 1	0	62	29539	0	0		29601
6.2	5380	5897	6760	1935	638	0	20610
6.3A	1355	350	0	0	0	0	1705
6.3B	<b>9</b> 21·	2100	Ø	0	0	Ø	3021
6.4	3	0	1200	13000	1100	Ø	15300
TOTAL	7656	8409	37499	14935	1738	Ø	70237
FYDP FU	NDING [ 6	.1-6.4 ]	(\$ in TH <b>OU</b> !	SANDS)			
	FY84	FY85	FY86	FY87	FY88	FY89	TOTAL
IN-H	2323	3369	3544	1835	1438	Ø	12509
CONT	5333	5040	33 <b>955</b>	13100	300	Ø	57728
TOTAL	7656	8409	37499	14935	1738	0	70237
UNFUNDE	D C 6.1-6	.4 ] (\$ iv	THOUSAND	<b>5</b> )			
	FY84	FY85	FY86	FY87	FY88	FY89	TOTAL
IN-H	0	377	1200	Ø	Ø	0	1577
CONT	Ø	EØØ	Ø	Ø	Ø	· 2	ହେଉ
TOTAL	Ø	977	1200	8	Ø	Ø	2177
OPN FUN	DING (\$	in THOUSAN	(SQI				
	FY84	FY85	FY86	FY87	FY88	FY89	TOTAL
TOTAL	ø	8	6400	, ø	0		6400
NUMBER	OF PROJEC	T FOUND =	27				

22-JAN-85 17:04:49

EYWORD (1): ) SENSOR 2)			•		3)		-
FYDP FU	NDING C F	DT&E ] (\$	in THOUSAN	DS)			
	FY84	FY85	FY86	FY87	FY88	FY89	TOTAL
6. 1		0		0	0		0
6.2	2221	2850	5550	800	0	•	11421
6. 3A	675	350	0	0	0	· 🕡	1025
6. 3B	0	0	0	0	<b>8</b> .	<b>9</b>	•
6.4	•	0	0	•	0	0	0
TOTAL	2896	3200	5550	800	0	•	12446
FYDP FU	NDING C 6	.1-6.4 ] (	s in THOUS	ANDS)			
	FY84	FY85	FY86	FY87	FY88	FY89	TOTAL
IN-H	526	750	900	0	e	0	2176
CONT	2370	2450	4650	800	Ø	0	10270
TOTAL	2896	3200	5550	800	æ	0	12446
		. A 7 (4 in	THOUSANDS	;)			
UNFUNDE	D C 6.1-6						
UNFUNDE	D [ 6.1-6 FY84	FY85	FY86	FY87	FY88	FY89	TOTAL
UNFUNDE			FY86 1200	FY87	FY88 0	FY89	TOTAL 1457
	FY84	FY85					
IN-H	FY84 0	FY85 257	1200	0	0	•	1457
IN-H CONT	FY84 9 9	FY85 257 150	1200 0 1200	@ @	e 0	@ @	1457 150
IN-H CONT TOTAL	FY84 9 9	FY85 257 150 407	1200 0 1200	@ @	e 0	@ @	1457 150

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MODULE: FNDSUM SERVICE: NAVY

FYDP FU	NDING E H	DT&E J (\$	in THOUSH	ND3)			
	FY84	FY85	FY86	FY87	FY88	FY89	TOTAL
5. 1	0	Ø	•	•	0	•	•
6. 2	1340	1247	1210	1135	638	· 0	5570
5. 3A	0	8	0	0	<b>6</b> .	· 🙆	6
5. 3B	921	2100	0	8	0	0	3021
5.4	•	0	1200	13000	1100	•	15300
TOTAL	2261	3347	2410	14135	1738	•	23891
FYDP FU	NDING C 6	.1-6.4 ] (	s in THOU	SANDS)	•		
	FY84	FY85	FY86	FY87	FY88	FY89	TOTAL
IN-H	1590	2557	2010	1835	1438	0	9430
CONT	671	790	400	12300	300	0	14461
TOTAL	2261	3347	2410	14135	1738	0	23891
UNFUNDE	D C 6. 1-6	.4] (\$ in	THOUSAND	3)			
	FY84	FY85	FY86	FY87	FY88	FY89	TOTAL
IN-H	0	15	0	Ø	Q	. @	15
CONT	0	150	Ø	<b>2</b>	0	Ø	150
TOTAL	0	165	Ø	0	•	•	165
OPN FUN	DING (\$	in THOUSAN	DS)				
	FY84	FY85	FY86	FY87	FY88	FY89	TOTAL
TOTAL	0	0	0	Ø	. 0	9	Ø

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22-JAN-85 17:07:57

MODULE: FNDSUM SERVICE: NAVY

KEYWORI	EFFECTOR						_
11 6110	CLLECION		2)		3)	•	•
FYDP F	I BNIDNU	RDT&E ] (s	in THOUSE	NDS)			
	FY84	F785	FY86	FY87	FY88	FY89	TOTAL
6. 1	Ø	ø		•			
6, 2	1655	1800	ě	0	0	9	e
6. 3A	620	Ø	ě	0	0	. 9	3455
6.38	0	ø	ő	0	€.	9	686
5.4	0	ø	ä	Q	•		9
TOTAL	2275	1800	ø	0	0	8	ě
<b>M</b>			•	0	8	9	4975
FYOP FU	NDING ( 6	1-6.4 3 (	* in THOUS	SANDS)			
<b>-1.</b>	FY84	FY65	FY86	FY87	FYBB	FY89	TOTAL
IN-H	125	Ø		_			, , , , , ,
CONT	2150	1800	ě	0	0	ø	125
TOTAL	2275	1500	8	9	0	9	3950
5 54 44 <del>5</del>			-	•	8	Ø	4075
UNFUNDE	D C 6. 1-6.	4 J (\$ in	THOUSANDS	)			4070
	FY84	FY85	<b>5</b> 140.0				
		7 705	FY86	FY87	FY88	FY89	7070
IN-H		15	_			. ,	TOTAL
CONT	•	150	0	0	Ø	9	
TOTAL	9	165	Ø Ø	Ø	Ø	ě	150 150
		-05	Ø.	9	0	ě	165
OPN FUNI	DING (* i	n THOUSAND	5)			•	190
	FY84	<b>5</b> 145-					
	( ( ) )	FY85	FYBS	FY87	FYBB	EV.	
TOTAL	ø	_				FY89	TOTAL
	**	Ø	8	0	0.	~	
NUMBER n	F PROJECT	En him	_		• .	0	Ø
	- HOUSE!	רטטאט 🛥	3				

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MODULE: FNDSUM SERVICE: NAVY

KEYWORD(s):

1) MANIP	ULATOR	a	<b>:</b> )		3)		
FYDP FUI	NDING [ R	DT&E ] (\$	in THOUSAN	IDS)			
	FY84	FY85	FY86	FY87	FY88	FY89	TOTAL
6. 1	Ø	62	5289	0	Ø	. 0	5351
6.2	Ø	Ø	0	0	Ø .	0	0
6.3A	0	0	Ø	0	0	0	6
6.3B	Ø	0	0	0	0	0	0
6.4	. 2	Ø	Ø	0	0	0	6
TOTAL	Ø	62	2583	0	Ø	Ø	5351
FYDP FUI	NDING [ 6	.1-6.4 3 (	\$ in THOUS	iANDS)			
	FY84	FY85	FY86	FY87	FY88	FYB9	TOTAL
IN-H	0	62	139	Ø	Ø	Ø	201
CONT	Ø	Ø	5150	0	Ø	0	5150
TOTAL	Ø	62	5289	0	Ø	<b>Ø</b> ,	5351
UNFUNDE	p [ 6.1-6	.4 ] (\$ in	THOUSANDS	3)			
	FY84	FY85	FY86	FY87	FY88	FY89	TOTAL
IN-H	0	ø	0	0	8	0	8
CONT	0	Ø	Ø	0	Ø	0	0
· TOTAL	. 0	Ø	Ø	0	Ø	Ø	6
OPN FUNI	DING (\$	in THOUSAN	DS)				
	FY84	FY85	FYB6	FY87	FYBB	FY89	TOTAL
TOTAL	Ø	0	<b>0</b> .	0	Ø	ø	Ø

22-JAN-85 17:09:00

KEYWORD(s):		
1) CONTROL	2)	<u>,</u> 3)

FYDP FL	NDING C R	DT&E ] (\$	in THQUSAN	IDS)			
	FY84	FY85	FY86	FY87	FY88	FY89	TOTAL
6.1	0	0	2050	0	0	8	2050
6. 2	129	0	Ø	Ø	2	. 0	129
6. 3A	Ø	0	0	0	<b>0</b> .	0	0
6.3P	Ø	Ø	Ø	0	0	0	0
6.4	0	0	0	0	0	0	Ø
TOTAL	129	Ø	2050	Ø	0	0	2179
FYDP FU	NDING [ 6	.1-6.4 ] (	\$ in THOUS	(BODE)			
	FY84	FY85	FY86	FY87	FY88	FY89	TOTAL
IN-H	12	Ø	95	Ø	Ø	Ø	107
CONT	117	Ø	1955	0	0	Ø	2072
TOTAL	129	Q	2050	Ø	Ø	. 0	2179
UNFUNDE	D C 6.1-6	.4] (\$ in	THOUSANDS	3)			
	FY84	FY95	FY86	FY87	FY88	FY89	TUTAL
IN-H	Ø	15	Ø	Ø	Ø	, 0	15
CONT	Ø	150	0	Ø	20	´ Ø	150
TOTAL	0	165	Ø	9	Ø	Ø	165
OPN FUN	DING (\$	in THOUSAN	DS)				
	FY84	FY85	FY86	FY87	FY88	FY89	TOTAL
TOTAL	0	Ø	700	0	. 0	0	700
NUMBER	OF PROJEC	T FOUND =	5				

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YDP FU	NDING C RI	TAE J (\$	in THOUSANI	05)			
	FY84	FY85	FY86	FY87	FY88	FY89	TOTAL
		0	20	0	. 25	0	
5. 1	0	ě	ě	0	8	· Ø	3
. 2	35	_	ŏ	0	Ø ·	0	3
, 3A	35	0	ø	0	Ø	0	1
. 3B	0	0	õ	ō.	Ø	0	(
5. 4	0	0	Ď	õ	ø	0	7
rotal	70	Q	_	-	-	•	
TYDP FL	JNDING C 6	.1-6.4 ] (	s in THOUS	ANDS)			
	FY84	FY85	FY86	FY87	FY88	FY89	TOTA
		0	0	0	Ø	Ø	7
IN-H	70	9	ŏ	0	Ø	Ø	
CONT	Ø	_	9	ø	ø	0	7
TOTAL	70	0	· ·	•			
UNFUNDI	ED C 6.1-6	.4] (\$ ir	THOUSANDS	3)			
	FY84	FY85	FY86	FY87	FY88	FY89	TOTA
	_		Q	ø	Ø	Ø ,	7
IN-H	Ø	75	Ø	ø	Ø	Ø	
CONT	Ø	<b>Ø</b>	Ø	Õ	ø	0	•
TOTAL	0	75	w	•	•		
OPN FU	NDING (#	in THOUSA	VDS)				
	FY84	FY85	FY86	FY87	FY88	FY89	דסדו
		9	Ø	Q	· Q	ø	

22-JAN-85 17:23:23

MODULE: FNDSUM SERVICE: NAVY

KEY	'WORD	(s):	
1)	SYS	INTEGRATION	2)

NUMBER OF PROJECT FOUND = 2

3)

FYDP 1	FUNDING	τ	RDT&E	3	(\$	in	THOUSANDS)
--------	---------	---	-------	---	-----	----	------------

	FY84	FY85	FY86	FY87	FY88	FY89	TOTAL
6.1	0	Ø	22200	Ø	ø	. 0	22200
6.2	0	0	0	0	Ø ·	0	Ø
.6.3A	Ø.	. 0	Ø	0	Ø	0	Ø
6.3B	Ø	Ø	Ø	ø	Ø	ø	ø
6.4	0	0	e Q	Q.	ø	ē	ē
TOTAL	ø	ē	22200	ø.	ø	Ö	55500
FYDP FUN			\$ in THOUS				
	FY84	FY85	FY86	FY87	FY88	FY89	TOTAL
IN-H	0	Ø	400	Ø	Ø ·	Ø	400
CONT	0	Ø	21800	0	Ø	0	21800
TOTAL	. 0	Ø	22200	ø	ø	ø	22200
UNFUNDEI	C 6.1-6	.4 ] (\$ in	THOUSANDS	<b>.</b>			
	FY84	FY85	FY86	FY87	FY88	FY89	TOTAL
IN-H	ø	0	Ø	Ø	Ø	ø	Ø
CONT	Ø	Ø	Ø	Ø	Ø	0	Ø
TOTAL	0	Ø	Ø.	Ø	ō	ø	Ø
OPN FUND	ING (\$	in THOUSAN	DS)				
•	FY84	FY85	FY86	FY87	FY88	FY89	TOTAL
TOTAL	Ø	Ø	5700	Ø	0	0	5700

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22-JAN-85 17:10:08

MODULE: FNDSUM SERVICE: NAVY

KE'	YWORD (s):	
1)	TNDUSTRIAL	9

NUMBER OF PROJECT FOUND = 17

3)

	FY84	FY85	FY86	FY87	FY88	FY89	TOTAL
6, 1	0	0	29501	0	Ø	. 0	29501
6, 2	4005	4150	4650	800	<b>@</b>	0	13605
6, 3A	1320	350	0	0	Ø	0	1670
5, 3B	0	0	0	Ø	0	0	Q
<b>5.</b> 4	0	0	0	Ø	Ø	0	0
TOTAL	5325	4500	34151	800	Ø	0	44776
FYDP FU	a 3 BNIDNI	.1-6.4 3 (	\$ in THOUS	(BODS			
•	FY84	FY8 <b>5</b>	FY86	FY87	FY88	FY89	TOTAL
IN-H	663	250	596	ø	0	0	1509
CONT	4662	4250	33555	800	Ø	0	43267
TOTAL	5325	4500	34151	800	0	ø	44776
UNFUNDE	D C 6.1-6	.4 ] (\$ ir	THOUSANDS	3)			
	FY84	FY85	FY86	FY87	FY88	FY89	TOTAL
IN-H	0	287	1200	ø	ø	, 0	1487
CONT	0	450	Ø	0	0	. O	450
TOTAL	0	737	1200	Ø	0	0	1937
OPN FUN	DING (\$	in THOUSAN	IDS)				
	FY84	FY85	FY86	FY87	FY88	FY89	TOTAL
TOTAL	ø	Ø	6400	ø	. 0	Ø	6400

22-JAN-85 17:10:44

KEYWORD (	(g) :						<b>-</b> .*
1) AUTON	IOMOUS VEH	ICLE 6	:)		3)		*
FYDP FL	INDING [ R	DT&E ] (\$	in THOUSAN	IDS)	-		
	FY84	FY85	FY86	FY87	FY88	FY89	TOTAL
6. 1	0	Ø	0	Ø	ø	0	0
6.2	690	676	610	580	350	0	2906
6.3A	35	0	0	0	0	` 0	35
6. 3B	Ø	0	Ø	0	0.	0	0
6.4	ø	0	0	0	Ø	0	Ø
TOTAL	725	676	610	589	350	0	2941
FYDP FU	NDING [ 6.	.1-6.4 J (	\$ in THGUS	(SANDS)			
	FY84	FY85	FY86	FY87	FY88	FY89	TOTAL
IN-H	615	526	510	480	350	0	2481
CONT	110	150	100	100	Ø	0	460
TOTAL	725	676	610	589	350	0	2941
UNFUNDE	m r 6.1-6.	.4 J (\$ in	THOUSANDS	<b>;</b> )			
	FY84	FY85	FY86	FY87	FY88	FY89	TOTAL
IN-H	0	25	0	0	0	0	25
CONT	Ø	0	0	0	0	. 0	Ø
TOTAL	0	25	Ø	Ø	Ø	. 6	25
OPN FUN	DING (\$	in THOUSAN	DS)				
•	FY84	FY85	FY86	FY87	FY88	FY89	TOTAL
TOTAL	•	0	. 0	0	. 0	0	0
NUMBER	OF PROJEC	T FOUND =	3				

22-JAN-85 17:11:20

MODULE: FNDSUM SERVICE: NAVY

KEYWORD(s):

1) MATERIALS HANDLING 2)

3)

FYDP FUNDING [ RDT&E ] (* in THOUSANDS)	FYDP	FUNDING	τ	RDT&E	3	(\$	in	THOUSANDS)
---	------	---------	---	-------	---	-----	----	------------

	FY84	FY85	FY86	FY87	FY88	FY89	TOTAL
6. 1	Ø	62	38	Ø	Ø	. 0	100
6, 2	0	Ø	0	0	Ø.	0	0
6. 3A	0	0	0	0	Ø	0	9
6. 3B	0	0	0	0	Ø	0	8
6.4	0	0	0	Ø	0	0	0
TOTAL	0	62	38	0	0	0	100

FYDP FUNDING [ 6.1-6.4 ] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89	TOTAL
*N-H	0	62	38	ø	ø	0	100
CONT	0	0	0	0	0	0	0
TOTAL	0	62	38	Ø	0	0	100

UNFUNDED [ 6.1-6.4 3 (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89	TOTAL
IN-H CONT TOTAL	Ø Ø Ø	ହ ହ ହ	Ø Ø	ଡ ଓ ଷ	Ø Ø	ି ଓ ଓ ଓ	ଡ ଡ ଡ

OPN FUNDING (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89	TOTAL
TOTAL	0	0	0	ø	Ø	Ø	0

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KEYWORD( 1) TELEO	s): PERATED S	ys 2	•		3)		· ·
FYDP FU	NDING [ R	DT&E ] (\$	in THOUSA	NDS)			
	FY84	FY85	FY86	FY87	FY88	FY89	TOTAL
6.1	0	9	0	0	0	. 0	0
6.2	650	571	600	555	288 <sub>.</sub>	0	2664
6.3A	25	Ø	0	0	0	•	- 25
6.3B	921	2100	0	0	0	8	3021
6.4	0	0	1200	13000	1100	0	15300
TOTAL	1596	2671	1800	13555	1388	•	21010
FYDP FU	NDING C 6	.1-6.4 3 (	\$ in THOUS	BANDS)			
	FY84	FY85	FY86	FY87	FY88	FY89	TOTAL
IN-H	1010	2031	1500	1355	1088	0	6984
CONT	386	640	300	12200	300	0	14026
TOTAL	1596	2671	1800	13555	1388	0	21010
UNFUNDE	D [ 6. 1-6	.43 (* ir	THOUSAND	S)			
	FY84	FY85	FY86	FY87	FY88	FY89	TOTAL
IN-H	0	15	0	0	0	0	15
CONT	0	150	0	0	0	. 🛭	150
TOTAL	0	165	0	Ø	0	0	165
OPN FUN	DING (\$	in THOUSAN	IDS)				
	FY84	FY85	FY86	FY87	FY88	FY89	TOTAL
TOTAL	0	0	ø	Ø	. 6	0	. 0
NUMBER	OF PROJEC	T FOUND =	5				

### U.S. ARMY HUMAN ENGINEERING LABORATORY

#### ROBOTIC INFORMATION SYSTEM

22-JAN-85 17:12:27

MODULE: FNDSUM SERVICE: NAVY

KEYWORD(s):

1) AUTO	SENSOR SY	's a	:)		3)		
FYDP FL	INDING C R	DT&E ] (\$	in TH <b>OUSAN</b>	ibs)			•
	FY84	FY85	FY86	FY87	FY88	FY89	TOTAL
6. 1	Q	9	•	•	0	6	0
6.2	0	500	900	8	9	. 😲	1400
6. 3A	Ø	0	9	•	<b>0</b> .	0	2
6. 3B	0	0	0	8	0	0	0
6.4	0	. 🛾 💇	0	0	0	0	0
TOTAL	0	500	900	•	9	8	1400
FYDP FL	INDING C 6	.1-6.4 ] (	\$ in THOUS	IANDS)			
	FY84	FY85	FY86	FY87	FY88	FY89	TOTAL
IN-H	0	500	900	0	0	0	1400
CONT	0	0	•	0	9	0	0
TOTAL	0	500	900	0	0	0	1400
UNFUNDE	D C 6.1-6	.43 (\$ in	THOUSANDS	3)			
	FY84	FY85	FY86	FY87	FY88	FY89	TOTAL
IN-H	0	0	0	0	0	0	Ø
CONT	0	Ø	•	8	9	ø	9
TOTAL	0	Ø	0	0	0	. 0	Ø
OPN FUN	DING (s	in THOUSAN	DS)				
	FY84	FY85	FY86	FY87	FY88	FY89	TOTAL
TOTAL	0	Q	9	0	. 0	0	Ø)
NUMBER	OF PROJEC	T FOUND =	1				

TAB B-3. Summary Printout: Air Porce

21-JAN-85 16:08:29

KEYWORD (	<b>3</b> ):	2	•		3)		• `
FYDP FU	NDING C R	DT&E ] (*	in THOUSAN	DS)			
	FY84	FY85	FY <b>86</b>	FY87	FY88	FY89	TOTAL
6. 1	4485	4485	2030	2000	2000	2000	17000
6. 2	3360	1865	2900	1749	0	•	9874
6. 3A	0	0	0	8	0	· 8	•
6. 3B	0	0	0	0	<b>0</b> .	•	0
6.4	0	0	0	•	0	0	•
TOTAL	7845	6350	4930	3749	5000	2000	26874
FYDP FU	NDING C 6	.1-6.4 ] (	• in THOUS	(SDVA)			
	FY84	FYES	FY85	FY87	FY88	FY89	TOTAL
IN-H	0	357	500	75 <b>0</b>	1000	1000	3607
CONT	7845	5993	4430	2999	1000	1000	23267
TOTAL	7845	6350	4930	3749	2000	2000	26874
UNFUNDE	D C 6.1-6	.4 J (\$ in	THOUSANDS	)			
	FY84	FY85	FY86	FY87	FY88	FY89	TOTAL
IN-H	0	ବ	Ø	0	6	0	0
CONT	8	700	0	0	0	. 0	700
TOTAL	0	700	8	0	Ø	0	700
7.8 FUND	ING (\$ i	n THOUSAND	S)	•			
•	FY84	FY85	FY86	FY87	FY88	FY89	TOTAL
TOTAL	4896	3298	. 3846	319	. 0	0	12359
NUMBER (	OF PROJEC	T FOUND =	13				

21-JAN-85 16:17:49

MODULE: FNDSUM SERVICE: AIR FORCE

·							- 1
KEYWORD ( 1) ACTUA		2			3)		
FYDP FU	NDING C R	DT&E ] (\$	in THOUSAN	DS)			
	FY84	FY85	FY86	FY87	FY88	FY89	TOTAL
6. 1	8	0	•	0		0	•
6.2	Ö	269	300	8	0	•	569
6. 3A	Ö	0	•	0	8	. 6	•
6, 3B	0	ø	•	•	<b>8</b> ·	0	0
6, 4	8	0	0	0	6	0	0
TOTAL	0	269	300	0	•	0	569
FYDP FL	INDING C 6	.1-6.4 3 (	* in THQUS	(BDDS)			
	FY84	FY85	FY86	FY87	FY88	FY89	TOTAL
IN-H		0	0	0	0	0	0
CONT	•	269	300	0	0	0	569
TOTAL	0	269	300	0	0	0	569
UNFUNDE	ED [ 6.1-6	.4 ] (\$ ir	THOUSANDS	3)			
	FY84	FY85	FY86	FY87	FYBB	FY89	TOTAL
IN-H		0	0	0	0	0	Ø
CONT	9	0	0	0	0	. @	0
TOTAL	0	. 0	6	0	0	0	Ø.
7.8 FUN	DING (* i	n THOUSANI	)S)				
	FY84	FY85	FY86	FY87	FY88	FY89	TOTAL
TOTEL	•	ø	0	0	. 6	0	0

21-JAN-85 16:18:28

KEYWORD( 1) ARTIF	e): ICIAL INT	EL 2	)		3)		• 🕏
FYDP FU	NDING [ R	DT&E ] (*	in THOUSAN	ips)			
	FY84	FY85	FY86	FY87	FY88	FY89	TOTAL
6. 1	0	Ø	9	0	0	0	Ø
6.2	1564	1272	1748	586	0	0	5170
6. 3A	0	8		0	•	0	6
6. 3B	0	0	0	0	0	· 🛚 😢	Ø
6.4	0	0	•	9	<b>8</b> ·	•	•
TOTAL	1564	1272	1748	586	8	0	5170
FYDP FU	NDING C 6	.1-6.4 ) (	s in THOUS	ANDS)			
	FY84	FY85	FY86	FY87	FYBB	FY89	TOTAL
IN-H	0	Ø.	9	0	0	0	0
CONT	1564	1272	1748	586	0	0	5170
TOTAL	1564	1272	1748	586	0	Ø	5170
UNFUNDE	D C 6.1-6	.43 (\$ in	THOUSANDS	3)			
	FY84	FY85	FY86	FY87	FY88	FY89	TOTAL
IN-H	•	0	0	0	0	0	0
CONT	0	0	0	0	0	0	0
TOTAL	3	Ø	0	0	0	- <b>Q</b>	8
7.8 FUND	ING (\$ i	n THOUSAND	S)				•
	FY84	FY85	FY86	FY87	FY88	FY89	TOTAL
TOTAL	1568	2ଉଉଉ	900	Ø	Ø	0	446B
NUMBER	OF PROJEC	T FOUND =	2		•		•

21-JAN-85 16:19:07

KEYWORD (%) 1

			2)		3)		
FYDP I	UNDING C	RDT&E ] (4	in THOUSE	ANDS)			
	FY84	FY85	FY86	FY87	FYSS	****	
5. 1	3300	3300			700	FY89	TOTAL
5.2	0		5000	2000	2000	***	
5. 3A	ě	2	0	8	2000	5000	14600
5. 3B	ě	Ø	0	ā		8	e
. 4	₹	Ø	0	ě	8	· 😝	e e
DTAL	9	₩.	•	0	<b>ø</b> .	8	è
- · · · · · · · · · · · · · · · · · · ·	3300	<b>3300</b>	2000	2000	•		8
'עמעי	10.15	•		2.000	2000	2000	14600
100 F	ONIGNU	6.1-6.4 7	s in THOUS	SANDS)			* 4000
	FY84	FY85					
		*******	FY86	FY87	FYSS	#	
N-H	8	-				FY89	TOTAL
TNO	3300	357	500	750			
DTAL		2943	1500	1520	1000	1000	3697
41716	3300	3300	2000		1000	1000	10993
				2000	2000	2000	14500
VFUNDE	D [ 6.1~6.	4 3 (\$ in	THOUSANDS	)			4.4000
	FY84	FY65					
			FY86	FY87	FY88	Evan	<b></b>
<b> - </b>	<b>ø</b>					FY83	TOTAL
NT	ě	0	•	8	0		
TAL	ě	0	0	0	_	8	21
	•	•	<b>@</b>	ā	0	8	
FUNDI	ING (s in	THOUSANDS		•	0	8	0
		- INCOMING	,				
	FY84	FY85	FY86	F145-5			
		•		FY87	FY88	FY89	TAU-1.
TAL	1300	8	_			. 199	TOTAL
		~	9	8	ø	_	
mer -	F PROJECT				•	Ø	1300

21-JAN-85 16:19:42

MODULE: FNDSUM SERVICE: AIR FORCE

KEYWORD(s):		
1) MANIPULATOR	2)	3)

FYDP FUNDING ( RDT&E ) (\* in THOUSANDS)

P FUNDING [ 6.1-6.4 ] (\$ in THOUSANDS)

	FY84	FY85	FY86	FY87	FY88	FY89	TOTAL
6. 1	1185	1185	30	ø	0	. 0	2400
6.2	370	63	0	Ø	Ø	. 0	433
6. 3A	0	Ø	0	0	0	9	0
6.3B	0	<b>Ø</b>	@	0	0	0	Ø
6.4	Ø	Ø	0	0	0	0	0

### TOTAL 1555 1248 30 2833

	FY84	FY85	FY86	FYE7	FY88	FY89	TOTAL
IN-H	0	0	Ø	Ø	Ø	0	0
CONT	1555	1248	30	Ø	Ø	0	2833
TOTAL	1555	1248	30	Ø	Ø	0	2833

UNFUNDED	[ 6.1-6.4	] (\$ :	In THOUSANDS)				
	FY84	FY85	FY86	FY87	FY88	FY89	TOTAL
IN-H	Ø	0	ø	Ø	Ø	Ø	´ 0
CONT	Ø	. 0	Ø	Ø	0	Ø	0
TOTAL	0	0	0	Ø	0	Ø	Ø

7.8 FUNL	)1NG (# 1)	N I HUUSHNU	15)				
	FY84	FY85	FY86	FY87	FY88 .	FY89	TOTAL
TOTAL	Ø	Ø	Ø	Ø	0	Ø	Ø

21-JAN-85 16:20:26

KEYWORD (		e	•		3)		•
FYDP FU	NDING C R	DT&E ] (\$	in THOUSAN	IDS)			
	FY84	FY85	FY86	FY87	FY88	FY89	TOTAL
6.1	0	Ø	0	Ø	ø	Ø	Ø
6.2	1426	261	852	1163	Ø	. Ø	3702
6.3A	0	6	0	0	0.	ø	6
6. 3B	Ø	Ø	0	0	Ø	0	0
6.4	0	0	0	Ø	0	ø	20
TOTAL	1426	261	852	1163	Ø	Ø	3702
FYDP FU	NDING C &	.1-6.4 ] (	\$ in THOUS	(SDNDS)			
	FY84	FY85	FY86	FY87	FY88	FY89	TOTAL
IN-H	Ø	Ø	Ø	Ø	Ø	0	Ø
CONT	1426	261	852	1163	Ø	Ø	3702
TOTAL	1426	261	852	1163	0	Ø	3702
UNFUNDE	D C 6.1-6	.4 J (\$ in	THOUSANDS	<b>3</b>			
	FY84	FY85	FY86	FY87	FY88	FY89	TOTAL
IN-H	0	0	0	ø	ø	Ø	6
CONT	Ø	700	0	Ø	Ø	Ø ,	700
TOTAL	Ø	700	Ø	Ø	Ø	Ø	700
7.8 FUND	ING (\$ 1	n THOUSAND	S)				
	FY84	FY85	FY86	FY87	FY88	FY89	TOTAL
TOTAL	1883	1236	2945	319	Ø	Ø	6384
NUMBER (	OF PROJEC	T FOUND =	3				

21-JAN-85 16:21:06

KEYWORD		_					
1) SYS 1	INTEGRATIO	N 2	; <b>)</b>		3)		•
FYDP FL	JNDING C R	DT&E ] (\$	in THOUSAN	IDS)			
	FY84	FY85	FY86	FY87	ĖY88	FY89	TOTAL
6. 1	0	0	0	0	0	0	0
6.2	0	Ø	Ø	0	Ø	. 0	0
6. 3A	0	0	Ø	0	0	0	Ø
6. 3B	Ø	Ø	Ø	0	0	Ø	0
<b>5. 4</b>	0	Ø	0	0	0	0	0
TOTAL	0	Ø	Ø	Ø	0	0	0
FYDP FL	NDING C 6	.1-6.4 ] (	\$ in THOUS	(SDNDS)			•
	FY84	FY85	FY86	FY87	FY88	FY89	TOTAL
IN-H	0	0	0	Ø	0	ø	ଡ
CONT	0	Ø	Ø	Ø	0	Ø	0
TOTAL	0	Ø	Ø	Ø	0	0	Ø
UNFUNDE	ED C 6.1-6	.4 ] (\$ in	THOUSANDS	3)			
	FY84	FY85	FY86	FY87	FY88	FY89	TOTAL
IN-H	0	. @	0	0	0	0	2
CONT	0	2	Ø	0	Ø	Ø	0
TOTAL	Ø	. 0	2	Ø	Ø	0	6
7.8 FUNI	DING (\$ i	n THOUSAND	S)				
	FY84	FY85	FY86	FY87	FY88	FY89	TOTAL
TOTAL	145	68	Ø	0	` 0	0	237
NUMBER	OF PROJEC	= מאניסF T	1				

21-JAN-85 16:21:45

MODULE: FNDSUM SERVICE: AIR FORCE

KEYWORD (	- > >						<b>→</b> ₹
	TRIAL APP	L 2	<b>)</b>		3)		<b>⊕</b>
EVAD EU	NOTNE E B	DT&E ] (\$	in TUDUCON	ine)			
FYDP FO	MUING C K	Dies 1 (2)	אווייייייייייייייייייייייייייייייייייי	ופעו			
	FY84	FY85	FY86	FY87	FY88	FY89	TOTAL
6. 1	4485	4485	2030	2000	2000	2000	17090
6.2	3360	1865	2900	1749	Ø	. 0	9874
6. 3A	0	0	0	Ø	•	0	•
6. 3B	0	Ø	Ø	0	Ø	0	0
6.4	0	0	Ø	Ø	Ø	0	6
TOTAL	7845	6350	4930	3749	2000	2000	26874
FYDP FU	NDING C 6	.1-6.4 ] (	\$ in THOUS	ANDS)			
	FY84	FY85	FY86	FY87	FY88	FY89	TOTAL
IN-H	Ø	357	500	750	1000	1000	3607
CONT	7845	5993	4430	2999	1000	1000	23267
TOTAL	7845	6350	4930	3749	2000	2000	26874
UNFUNDE	D [ 6.1-6	.4] (\$ in	THOUSANDS	· ·			
	FY84	FY85 .	FY86	FY87	FY88	FY89	TOTAL
IN-H	0	Ø	Ø	0	<b>Ø</b>	0	0
CONT	Ø	700	Ø	0	Ø	0	700
TOTAL	Ø	700	0	0	0	0	700
7.8 FUND	ING (* i	n THOUSAND	S)				·
	FY84	FY85	FY86	FY87	FY88	FY89	TOTAL
TOTAL	4896	3298	3846	319	` 0	0	. 12359